TECHNICAL MANUAL

INSTALLATION MANUAL FOR EXPORT UNITS
SERVICE MANUAL FOR DOMESTIC UNITS

AJ-44T SERIES

AJ-44TE
AJ-44TG
AJ-44TS

AJ-66T SERIES

AJ-66TE
AJ-66TG
AJ-66TS

AJ-80T SERIES

AJ-80TE
AJ-80TS

AND ASSOCIATED OPTION PACKAGES INCLUDING:

SIDE LOADER

Jackson™

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April 19, 2007
P/N 7610-003-07-21 (Revision C)

REVISION	REVISION DATE	MADE BY	APPLICABLE ECN	DETAILS
A	08-03-2005	MAW	7442	Initial release of manual.
B	02-13-2006	MAW	7600, 7558 7462, 7367 7463	Added gas exhaust fan schematic, updated electric exhaust fan schematic. Replaced rinse drain weldment 05700-021-68-28 with 05700-002-51-12. Added wash, rinse and psi decals. Changed the door assemblies. Added the rinse fill motor assembly. Added Gas Models.
C	3-21-2006	MAW	7571	Change to new layout. Change themostats and add replacement kits.
PG. 100	04-19-2007	MAW	7898	Added 09905-003-32-20 fan load decal.

NOMENCLATURE FOR THE MODELS COVERED IN THIS MANUAL

AJ-44TS

AJ = AJ series of rack conveyors

44 = 44” wide machine
66 = 66” wide machine
80 = 80” wide machine

TE = Electrically heated, hot water sanitizing machine
TG = Gas heated, hot water sanitizing machine
TS = Steam heated, hot water sanitizing machine

Model:_____

Serial No.:_____

Installation Date:_____

Service Rep. Name:_____

Phone No.:_____

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SECTION 1:
SPECIFICATION INFORMATION

SECTION 1: SPECIFICATION INFORMATION

OPERATING CHARACTERISTICS

RACKS PER HOUR:

AJ-44-66-80TE/TG/TS	204

DISHES OR GLASSES PER HOUR:

AJ-44-66-80TE/TG/TS	5100

PREWASH TANK CAPACITY (GALLONS):

AJ-66TE/TG/TS	17.25
AJ-80TE/TG/TS	17.25

WASH TANK CAPACITY (GALLONS):

AJ-44-66-80TE/TG/TS	20.4

PREWASH PUMP CAPACITY (GPM):

AJ-66TE/TG/TS	120
AJ-80TE/TG/TS	270

WASH PUMP CAPACITY

GALLONS PER MINUTE (ALL MODELS):	270

VENTING REQUIREMENTS (CFM)(100% CAP.):

INPUT END	200
OUTPUT END	400
TOTAL	600

CONVEYOR SPEED (FPM):

AJ-44-66-80TE/TG/TS MACHINES	5.7

GALLONS PER RACK:

AJ-44-66-80TE/TG/TS MACHINES	.69

WATER TEMPERATURES:

AJ-44-66-80TE/TG/TS MODELS:

PREWASH (RECOMMENDED) (AJ-66 & AJ-80)	110-140°F
WASH (MINIMUM)	160°F
RINSE (MINIMUM)	180°F

FLOW PRESSURE (PSI)	20 ± 5

FLOWRATE (GPM):

AJ-44-66-80TE/TG/TS	3.1

STEAM COIL TANK HEAT (TS MODELS ONLY):

STEAM INLET PRESSURE (PSIG)	10-20
STEAM CONNECTION NPT	3/4”
CONSUMPTION @ 15 PSIG (lbs/hr):	60

MOTOR ELECTRICAL CHARACTERISTICS:

DRIVE MOTOR HP	1/4
WASH MOTOR HP	2
POWER RINSE MOTOR HP	2
PREWASH MOTOR HP:	
AJ-66TE/TG/TS MODELS	1
AJ-80TE/TG/TS MODELS	2

NOTE: Always refer to the machine data plate for specific electrical and water requirements. The material provided on this page is for reference only and may be subject to change without notice.

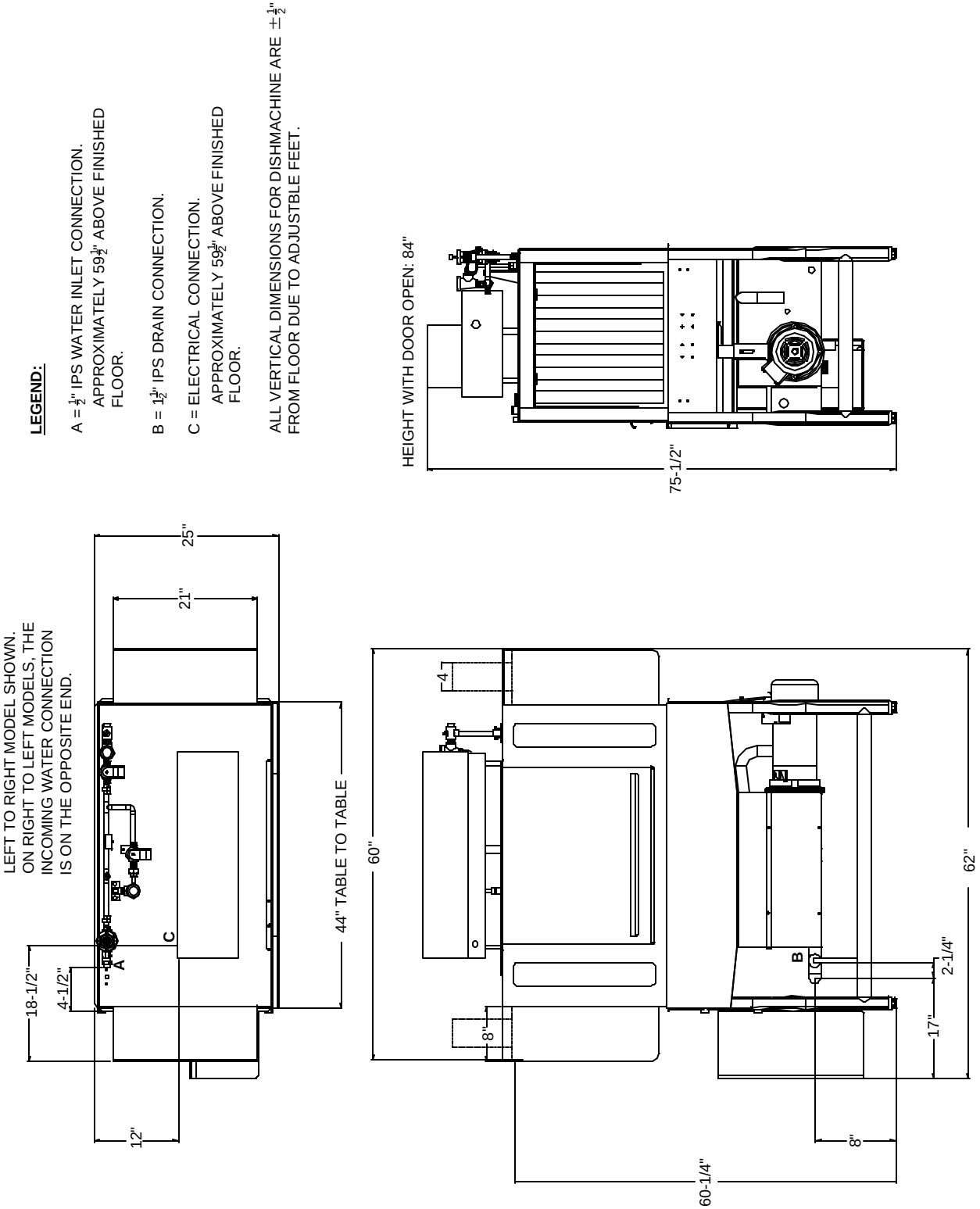
SECTION 1: SPECIFICATION INFORMATION

ELECTRICAL REQUIREMENTS

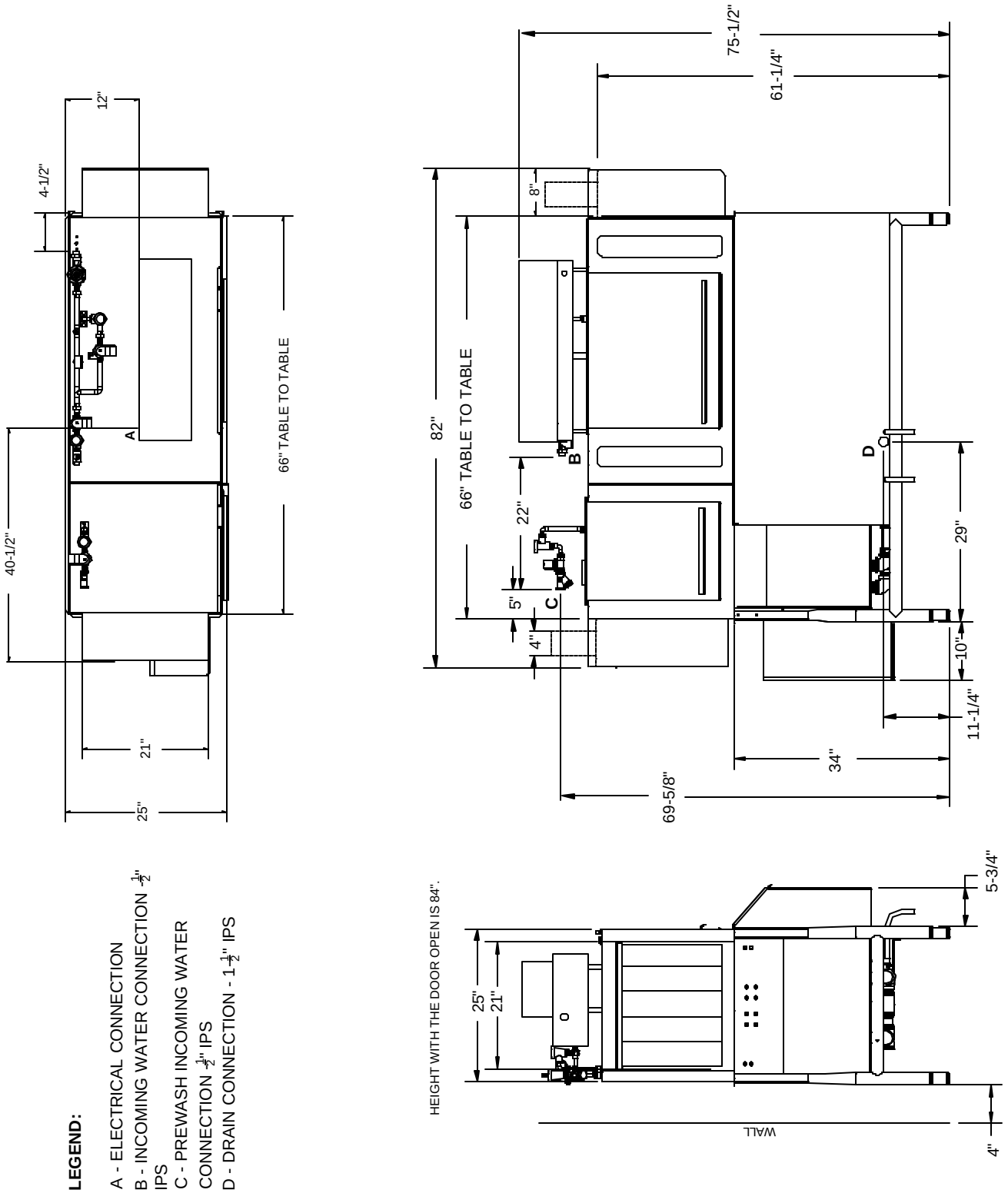
NOTE: Typical Electrical Circuit is based upon (1) 125% of the full amperage load of the machine and (2) typical fixed-trip circuit breaker sizes as listed in the NEC 2002 Edition. Local codes may require more stringent protection than what is displayed here. Always verify with your electrical service contractor that your circuit protection is adequate and meets all applicable national and local codes. These numbers are provided in this manual simply for reference and may change without notice at any given time.

MODEL	VOLTS	PH	HZ	RINSE HEATER RATINGS	TOTAL AMPS	TYPICAL ELECTRICAL CIRCUIT
AJ-44TE	208	1	60	N/A	97 A	125 AMP
AJ-44TE	230	1	60	N/A	89 A	125 AMP
AJ-44TE	208	3	60	N/A	57 A	80 AMP
AJ-44TE	230	3	60	N/A	49 A	70 AMP
AJ-44TE	460	3	60	N/A	25 A	35 AMP
AJ-44TG	208	1	60	N/A	12 A	15 AMP
AJ-44TG	230	1	60	N/A	12 A	15 AMP
AJ-44TG	208	3	60	N/A	8 A	15 AMP
AJ-44TG	230	3	60	N/A	8 A	15 AMP
AJ-44TG	460	3	60	N/A	5 A	15 AMP
AJ-44TS	208	1	60	N/A	11 A	15 AMP
AJ-44TS	230	1	60	N/A	11 A	15 AMP
AJ-44TS	208	3	60	N/A	7 A	15 AMP
AJ-44TS	230	3	60	N/A	7 A	15 AMP
AJ-44TS	460	3	60	N/A	4 A	15 AMP
AJ-66TE	208	1	60	N/A	103 A	150 AMP
AJ-66TE	230	1	60	N/A	95 A	125 AMP
AJ-66TE	208	3	60	N/A	61 A	80 AMP
AJ-66TE	230	3	60	N/A	52 A	70 AMP
AJ-66TE	460	3	60	N/A	26 A	35 AMP
AJ-66TG	208	1	60	N/A	18 A	25 AMP
AJ-66TG	230	1	60	N/A	18 A	25 AMP
AJ-66TG	208	3	60	N/A	12 A	15 AMP
AJ-66TG	230	3	60	N/A	12 A	15 AMP
AJ-66TG	460	3	60	N/A	7 A	15 AMP
AJ-66TS	208	1	60	N/A	17 A	25 AMP
AJ-66TS	230	1	60	N/A	17 A	25 AMP
AJ-66TS	208	3	60	N/A	11 A	15 AMP
AJ-66TS	230	3	60	N/A	11 A	15 AMP
AJ-66TS	460	3	60	N/A	6 A	15 AMP
AJ-80TE	208	1	60	N/A	106 A	150 AMP
AJ-80TE	230	1	60	N/A	97 A	125 AMP
AJ-80TE	208	3	60	N/A	63 A	80 AMP
AJ-80TE	230	3	60	N/A	58 A	80 AMP
AJ-80TE	460	3	60	N/A	29 A	40 AMP
AJ-80TG	208	1	60	N/A	19 A	25 AMP
AJ-80TG	230	1	60	N/A	19 A	25 AMP
AJ-80TG	208	3	60	N/A	13 A	20 AMP
AJ-80TG	230	3	60	N/A	13 A	20 AMP
AJ-80TG	460	3	60	N/A	7 A	15 AMP
AJ-80TS	208	1	60	N/A	19 A	25 AMP
AJ-80TS	230	1	60	N/A	19 A	25 AMP
AJ-80TS	208	3	60	N/A	13 A	20 AMP
AJ-80TS	230	3	60	N/A	13 A	20 AMP
AJ-80TS	460	3	60	N/A	7 A	15 AMP

AJ-44T DIMENSIONS



AJ-66T (LEFT TO RIGHT) DIMENSIONS



LEGEND:

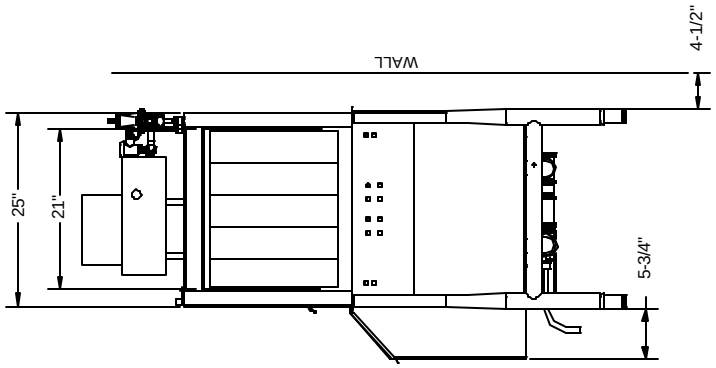
A - ELECTRICAL CONNECTION
B - INCOMING WATER CONNECTION - $\frac{1}{2}$" IPS
C - PREWASH INCOMING WATER CONNECTION - $\frac{1}{2}$" IPS
D - DRAIN CONNECTION - $1\frac{1}{2}$" IPS

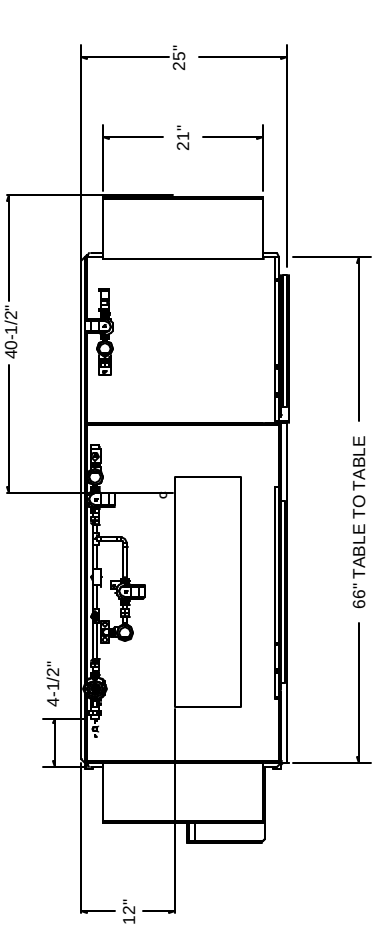
AJ-66T (RIGHT TO LEFT) DIMENSIONS

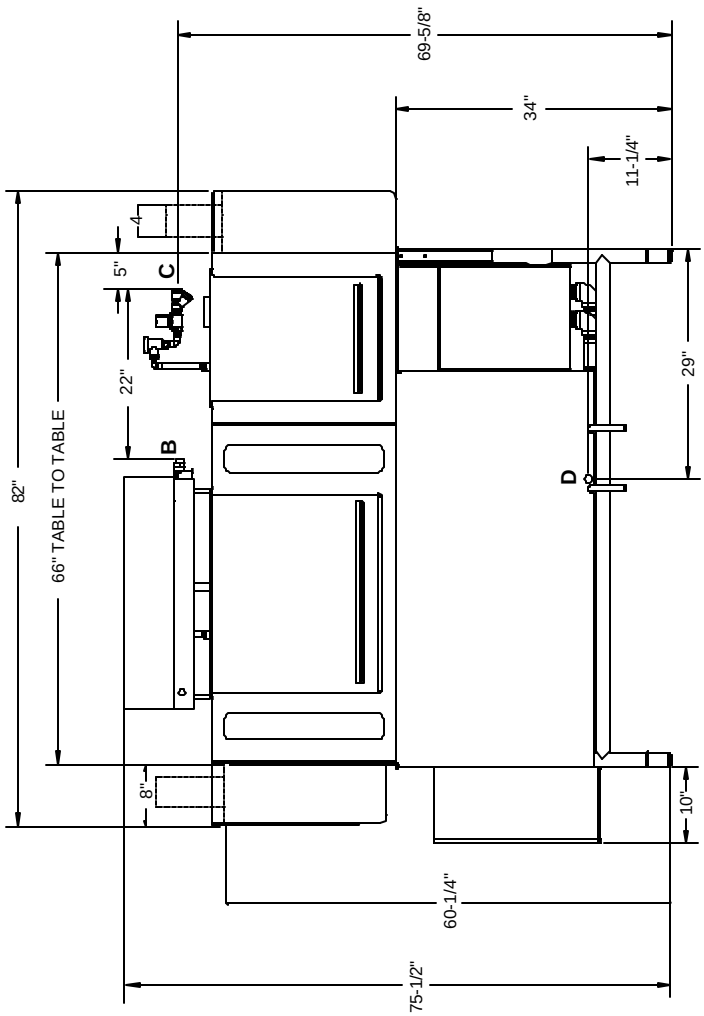
LEGEND:

A - ELECTRICAL CONNECTION
B - INCOMING WATER CONNECTION - 1/2" IPS
C - PREWASH INCOMING WATER CONNECTION - 1/2" IPS
D - DRAIN CONNECTION - 1-1/2" IPS

HEIGHT WITH DOORS OPEN IS 84".

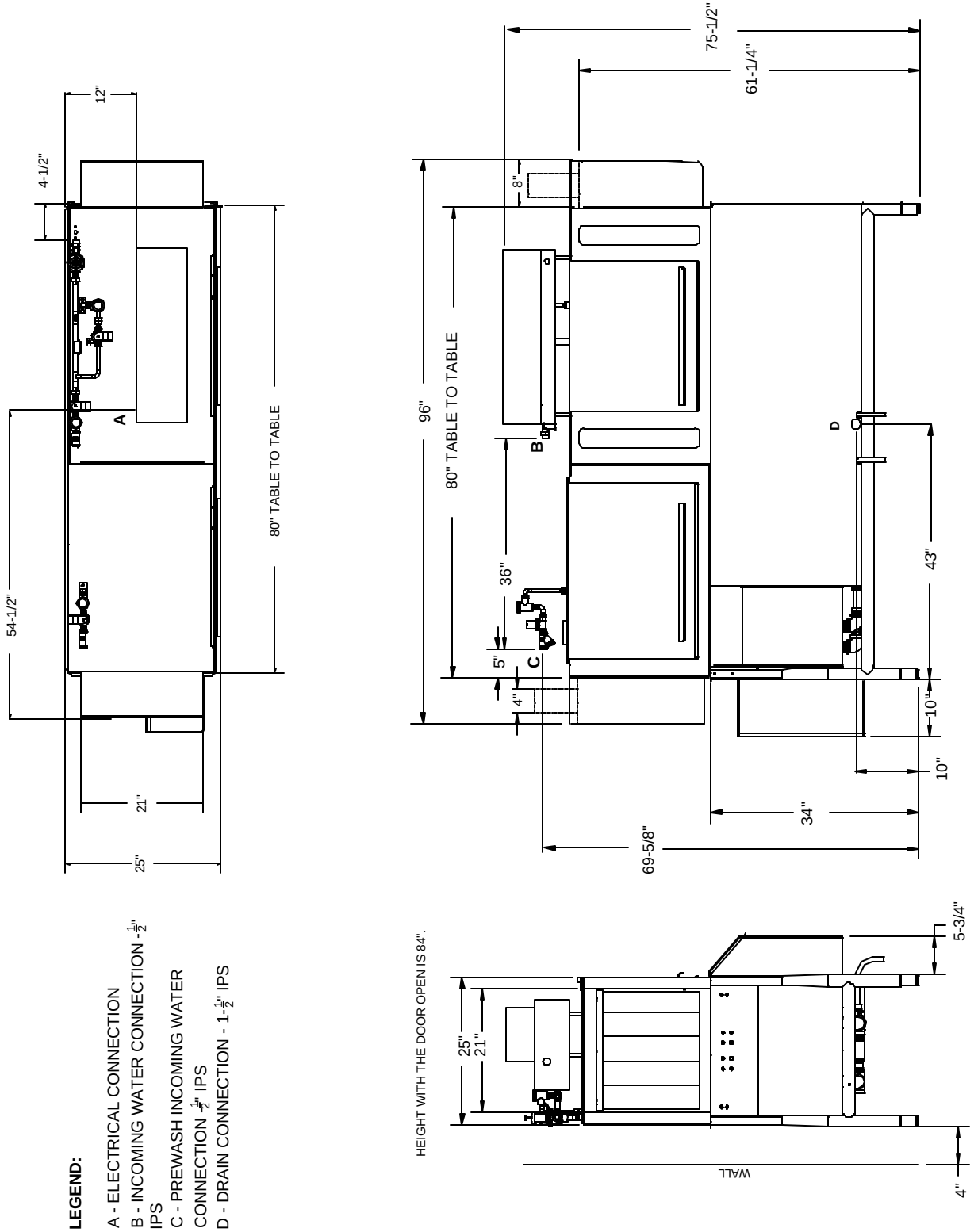






SECTION 1: SPECIFICATION INFORMATION

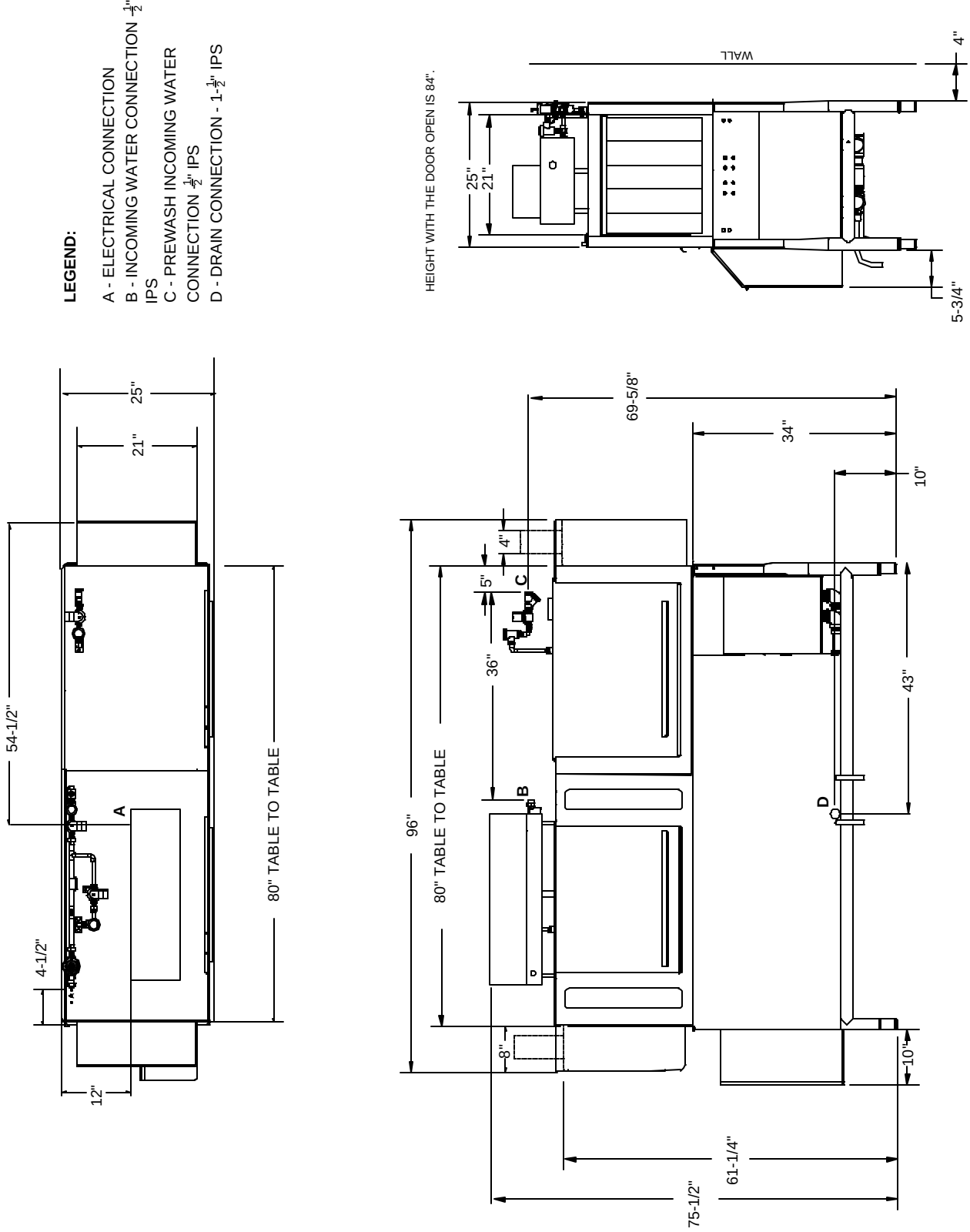
AJ-80T (LEFT TO RIGHT) DIMENSIONS



LEGEND:

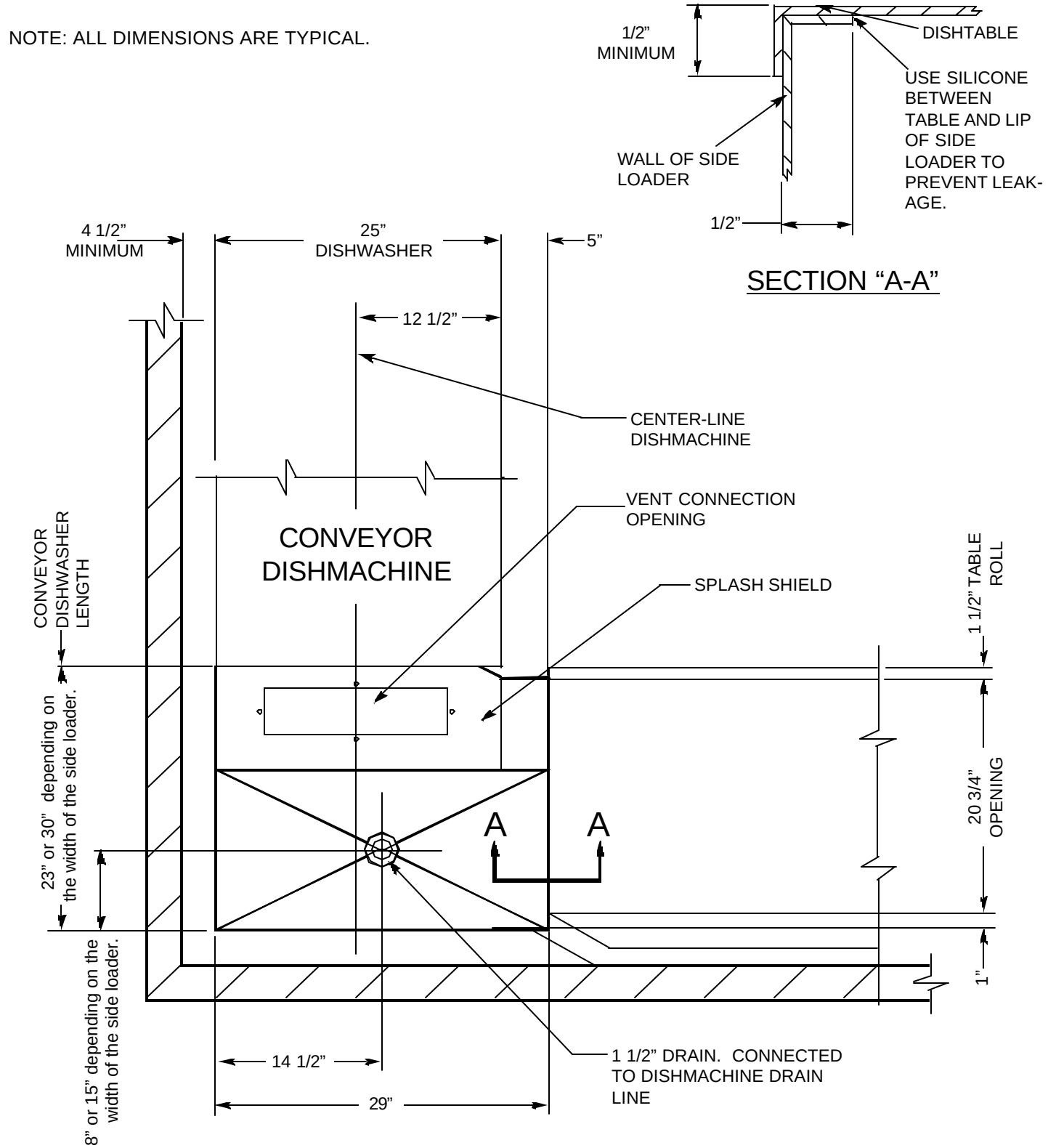
A - ELECTRICAL CONNECTION
B - INCOMING WATER CONNECTION - 1/2" IPS
C - PREWASH INCOMING WATER CONNECTION - 1/2" IPS
D - DRAIN CONNECTION - 1-1/2" IPS

AJ-80T (RIGHT TO LEFT) DIMENSIONS

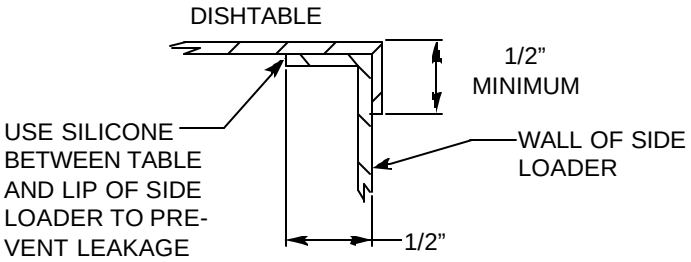


SIDE LOADER (LEFT TO RIGHT) DIMENSIONS

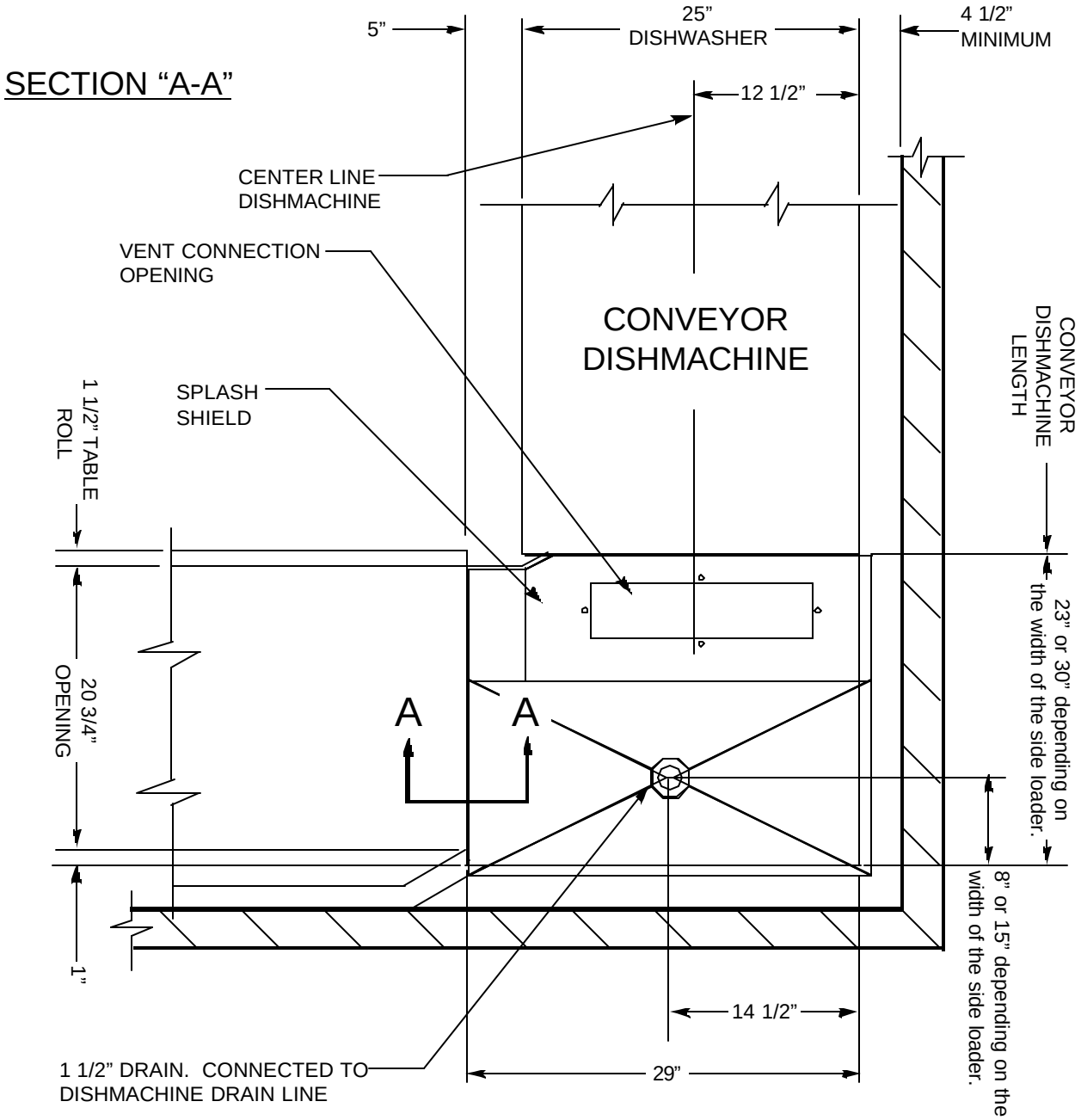
NOTE: ALL DIMENSIONS ARE TYPICAL.



SIDE LOADER (RIGHT TO LEFT) DIMENSIONS



NOTE: ALL DIMENSIONS ARE TYPICAL.



SIDE LOADER (INSTALLED) DIMENSIONS

23" SIDE LOADER DIMENSIONS

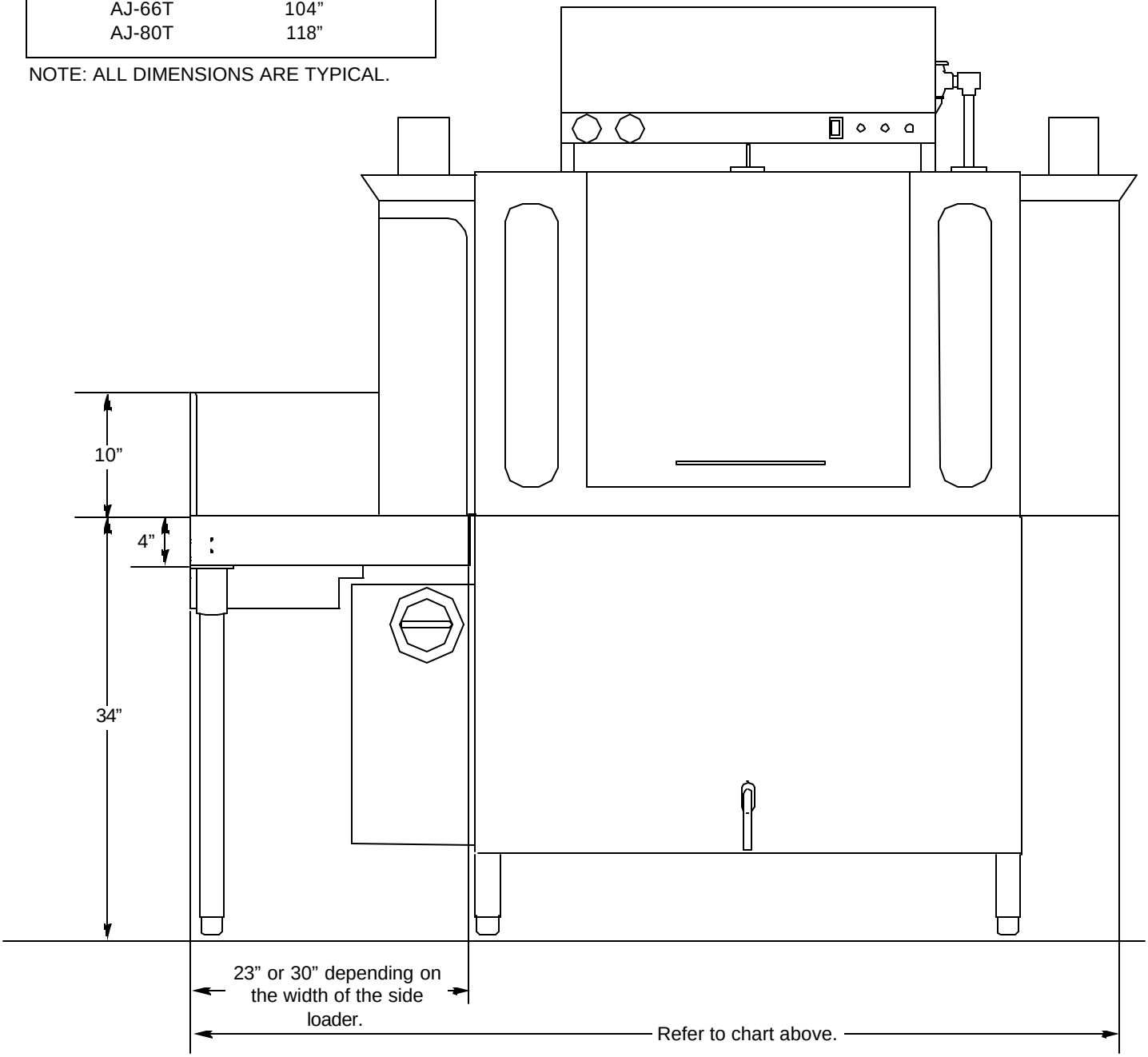
MODEL	DIMENSIONS
AJ-44T	75"
AJ-66T	97"
AJ-80T	111"

30" SIDE LOADER DIMENSIONS

MODEL	DIMENSIONS
AJ-44T	82"
AJ-66T	104"
AJ-80T	118"

NOTE: ALL DIMENSIONS ARE TYPICAL.

(Left to Right installation shown for reference.)



SECTION 2:
INSTALLATION & OPERATION INSTRUCTIONS

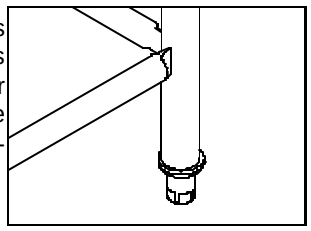
SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

INSTALLATION INSTRUCTIONS

NOTE: THE INSTRUCTIONS PROVIDED HEREIN, UNLESS OTHERWISE SPECIFIED ARE FOR THE DISHMACHINES ONLY. THERE ARE SEPARATE DIRECTIONS FOR THE GAS BOOSTER.

VISUAL INSPECTION: Before installing the unit, check the container and machine for damage. A damaged container is an indicator that there may be some damage to the machine. If there is damage to both the container and machine, do not throw away the container. The dishmachine has been inspected and packed at the factory and is expected to arrive to you in new, undamaged condition. However, rough handling by carriers or others may result in damage to the unit while in transit. If such a situation occurs, do not return the unit to Jackson; instead, contact the carrier and ask them to send a representative to the site to inspect the damage to the unit and to complete an inspection report. You must contact the carrier within 48 hours of receiving the machine. Also, contact the dealer through which you purchased the unit.

UNPACKING THE DISHMACHINE: The machine should be unboxed and removed from shipping pallet prior to being installed. Open the front door and remove all of the packing materials. Once unpacked, ensure that there are no missing parts from the machine. This may not be obvious at first. If it is discovered that an item is missing, contact Jackson immediately.

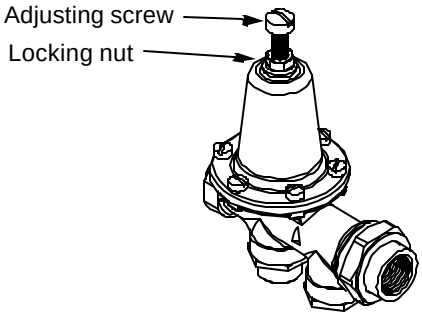


LEVEL THE DISHMACHINE: The dishmachine is designed to operate while being level. This is important to prevent any damage to the machine during operation and to ensure the best results when washing ware. The unit comes with adjustable bullet feet, which can be turned using a pair of channel locks or by hand if the unit can be raised safely. Ensure that the unit is level from side to side and from front to back before making any connections. You will be able to adjust the overall height of the unit by turning the bullet feet from between 75-1/2" to 76-1/2".

PLUMBING THE DISHMACHINE: All plumbing connections must comply with all applicable local, state, and national plumbing codes. The plumber is responsible for ensuring that the incoming water line is thoroughly flushed prior to connecting it to any component of the dishmachine. It is necessary to remove all foreign debris from the water line that may potentially get trapped in the valves or cause an obstruction. Any valves that are fouled as a result of foreign matter left in the water line, and any expenses resulting from this fouling, are not the responsibility of the manufacturer.

Water hardness should be a maximum of 6 grains per gallon. Harder water should be treated prior to using the machine. Iron in the water supply can cause staining. A filter designed to remove iron from the supply water is highly recommended for supplies in excess of 0.1 ppm (parts per million).

CONNECTING THE DRAIN LINE: The drain for the models covered in this manual are gravity discharge drains. All piping from the machine to the drain must be a minimum 1 1/2" NPT and shall not be reduced. There must also be an air gap between the machine drain line and the floor sink or drain. If a grease trap is required by code, it should have a flow capacity of 30 gallons per minute.



Incoming Plumbing Connection

WATER SUPPLY CONNECTION: Ensure that you have read the section entitled "PLUMBING THE DISHMACHINE" above before proceeding. The supply water temperature must meet the minimum requirements listed on the machine data plate. Install the water supply line (1/2" pipe size minimum) to the dishmachine line strainer. It is recommended that a water shut-off valve be installed in the water line between the main supply and the machine to allow access for service. The water supply line is to be capable of 25 PSI "flow" pressure at the recommended temperature indicated on the data plate.

If the water level is too low or too high, check the incoming water pressure. It should be 20 $\pm$ 5 PSI. Too high of pressure results in too much water; too low of pressure results in too little water. To adust the regulator, loosen the nut at the top, this will allow you to screw or unscrew the adjustment. With a screwdriver, turn the adjuster clockwise to increase pressure or counter clockwise to decrease it.

Do not confuse static pressure with flow pressure. Static pressure is the line pressure in a "no flow" condition (all valves and services are closed). Flow pressure is the pressure in the fill line when the fill valve is opened during the cycle.

It is also recommended that a shock absorber (not supplied) be installed in the incoming water line. This prevents line hammer (hydraulic shock), induced by the solenoid valve as it operates, from causing damage to the equipment.

STEAM LINE CONNECTIONS: Some machines covered in this manual are designed to use low pressure steam as a source of heat for wash tank water. The machines come with lines by which outside source steam needs to be connected. Connect all incoming steam lines in accordance with the steam booster manufacturer's instructions. Ensure that all applicable codes and regulations are adhered to. See machine data plate for information concerning steam flow pressure.

GAS CONNECTIONS: Some machines covered in this manual are designed to use gas as an outside source of heat for wash tank water. The machines come with connections by which an outside source needs to be connected. Connect all incoming gas lines in accordance with the gas booster manufacturer's instructions. Ensure that all applicable codes and regulations are adhered to.

PLUMBING CHECK: Slowly turn on the water supply to the machine after the incoming fill line and the drain line have been installed. Check for any leaks and repair as required. All leaks must be repaired prior to placing the machine in operation.

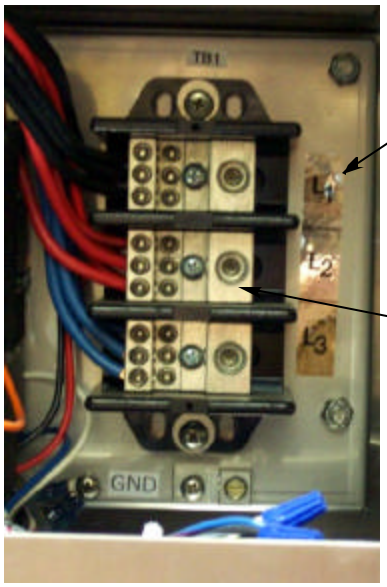
ELECTRICAL POWER CONNECTION: Electrical and grounding connections must comply with the applicable portions of the National Electrical Code ANSI/NFPA 70 (latest edition) and/or other electrical codes.

Disconnect electrical power supply and place a tag at the disconnect switch to indicate that you are working on the circuit.

The dishmachine data plate is located on the right side and to the front of the machine. Refer to the data plate for machine operating requirements, machine voltage, total amperage load and serial number.

To install the incoming power lines, open the control box. Install conduit into the pre-punched holes in the back of the control box. Route power wires and connect to power block and grounding lug. Install the service wires (L1, L2, and L3 (3 phase only)) to the appropriate terminals as they are marked on the terminal block. Install the grounding wire into the lug provided. Tighten the connections. It is recommended that "DE-OX" or another similar anti-oxidation agent be used on all power connections.

VOLTAGE CHECK: Ensure that the power switch is in the OFF position and apply power to the dishmachine. Check the incoming power at the terminal block and ensure it corresponds to the voltage listed on the data plate. If not, contact a qualified service agency to examine the problem. Do not run the dishmachine if the voltage is too high or too low. Shut off the service breaker and mark it as being for the dishmachine. Advise all proper personnel of any problems and of the location of the service breaker. Replace the control box cover and tighten down the screws.



Incoming Power Connection

VENTILATION OF DISHMACHINE: The dishmachine should be located with provisions for venting into an adequate exhaust hood or ventilation system. This is essential to permit efficient removal of the condensation exhaust. Ensure that the exhaust system is acceptable in accordance with all applicable codes and standards.

NOTE: Any damage that is caused by steam or moisture due to improper ventilation is NOT covered under the warranty.

This units covered in this manual have the following exhaust requirements:

Load End:	200 CFM
Unload End:	400 CFM

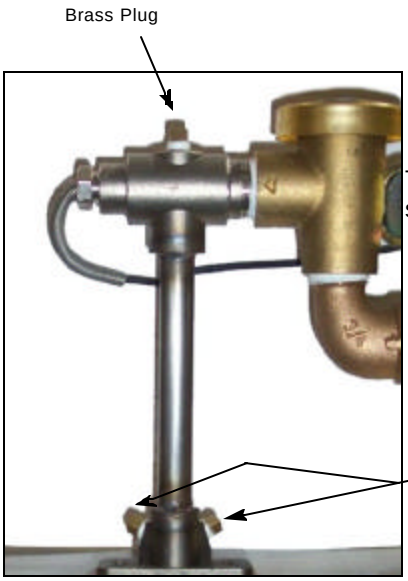
The exhaust system must be sized to handle this volume for the dishmachine to operate as it was designed to.

ELECTRIC HEAT: The thermostats for the machines covered in this manual are factory set. They should not be adjusted except by an authorized service agent.

CHEMICAL FEEDER EQUIPMENT: Detergent may be introduced into the unit through the removal of the bulkhead plug in the rear of the tub and replacing it with the third party detergent injection fitting. Remove the bulkhead plug in the side of the tub to install the detergent concentration probe.

For more information concerning detergent concerns, please refer to the page entitled “Detergent Control”.

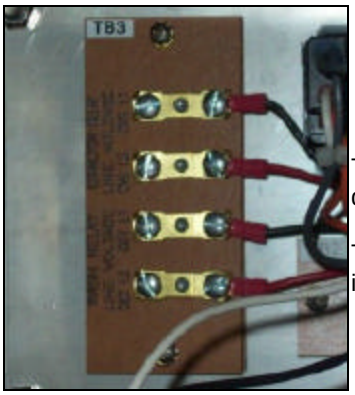
Detergent Connection Point
(Machine rear view)



The 1/8” brass plugs on the incoming plumbing rinse injector may be removed to install sanitizer and rinse aid injection fittings.

Back of Control Box

All wires for the chemical injectors should be routed through one of the extra openings in the back of the control box.



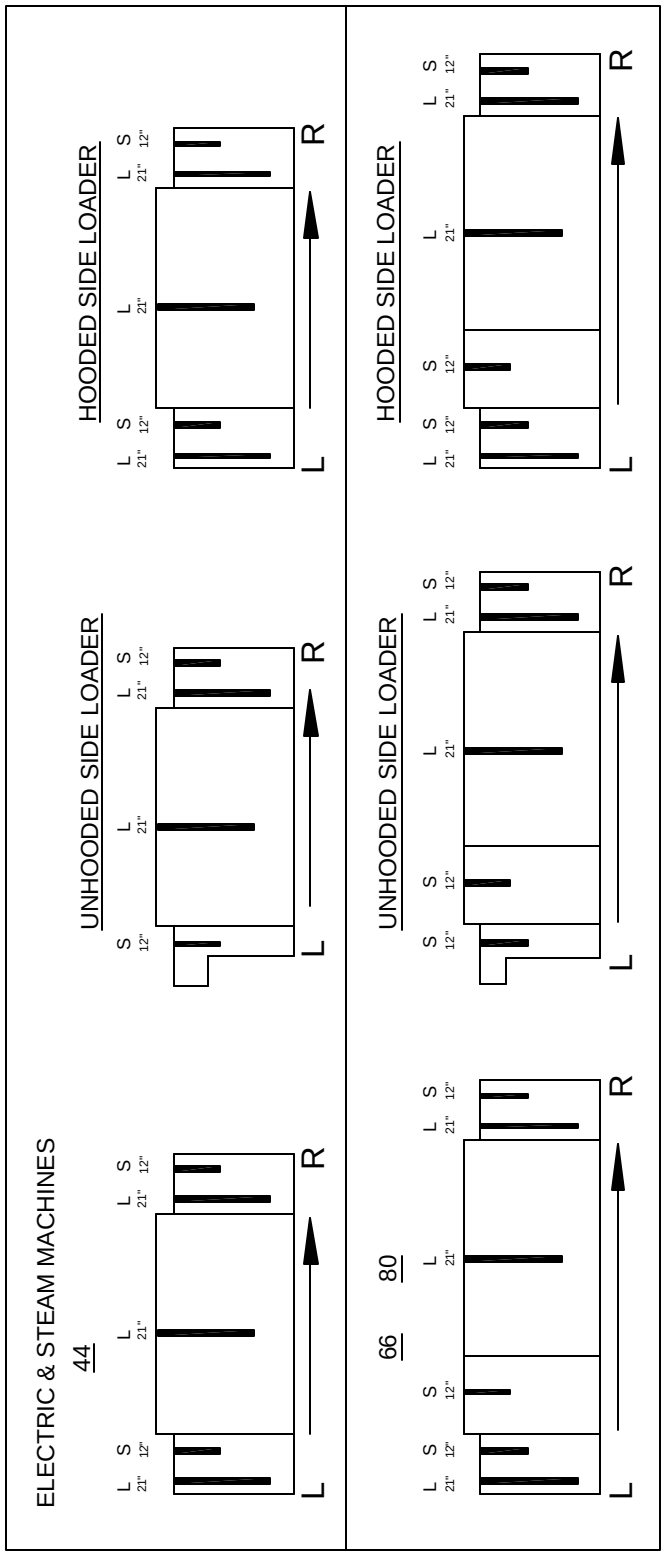
Aid Connection Points

Terminals in the control box marked “CVS” provide a constant voltage signal whenever the drive motor is operating.

Terminals in the control box marked “DET” provide a voltage signal whenever the wash motor is operating.

CURTAIN INSTALLATION DIAGRAMS

Please refer to the chart for placement of the curtains.



DELIMING OPERATIONS

DELIMING OPERATIONS: In order to maintain the dishmachine at its optimum performance level, it will be required to remove lime and corrosion deposits on a frequent basis. A deliming solution should be available from your detergent supplier. Read and follow all instructions on the label of the deliming solution.

To proceed with the deliming operation, fill the dishmachine and add the correct amount of deliming solution as recommended by the deliming solution manufacturer. The water capacity of the various tanks of the dishmachine can be verified on the specification sheet(s) of this manual.

Perform the following operations to delime the dishmachine:

1. Turn the NORMAL/DELIME switch on the back of the control box to the DELIME position.

2. Disconnect or turn off all chemical feeder pumps.

3. Close all doors (after adding the deliming solution).

4. Run the machine for the recommended period of time.

5. Turn the unit off and open the doors.

6. Wait five minutes, then inspect the inside of the machine. If the machine is not delimed, run another time cycle as per the deliming solution's instructions.

7. When clean, drain and re-fill the machine.

8. Run in MANUAL for 10 minutes to remove residual deliming solution.

9. Drain and re-fill the machine.

This equipment is not recommend for use with deionized water or other aggressive fluids. Use of deionized water or other aggressive fluids will result in corrosion and failure of materials and components. Use of deionized water or other aggressive fluids will void the manufacturer's warranty.

SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

SIDE LOADER INSTALLATION & OPERATION INSTRUCTIONS

This accessory assists in the delivery of a full dish rack from the break down (scrapping) table to the dishmachine. It will convert the direction of travel 90°. Since the Side Loader is shipped mounted on the conveyor dishwasher there is no additional installation required for this option. As it is operated mechanically by the dishwasher it does not require any plumbing or electrical connections.

This Side Loader does not require or add any additional electrical or mechanical devices to the unit which could create operational or maintenance problems. As designed the drive mechanism is powered by the conveyor drive motor on the dishmachine. An extension on the pawl bar provides the drive to push the racks into the unit.

PREPARATION: Before proceeding with the start-up of the unit, verify that the Side Loader pan strainer is installed.

WARE PREPARATION: Proper preparation of ware will help ensure good results and less re-washes. If not done properly, ware may not come out clean and the efficiency of the dishmachine will be reduced. It is important to remember that a dishmachine is not a garbage disposal and that simply throwing unscraped dishes into the machine simply defeats the purpose altogether of washing the ware. Scraps should be removed from ware prior to being loaded into a rack. Pre-rinsing and pre-soaking are good ideas, especially for silverware and casserole dishes. Place cups and glasses upside down in racks so that they do not hold water during the cycle. The dishmachine is meant not only to clean, but to sanitize as well, to destroy all of the bacteria that could be harmful to human beings. In order to do this, ware must be properly prepared prior to being placed in the machine.

WASHING A RACK OF WARE: Once a rack is fully loaded it should be positioned against the front of the dish table. The rack should then be moved into the Side Loader until it activates the actuator switch. Once the the machine is started, it should pull the rack through the machine and push it out the unload end. Once a rack has started through, you may put another rack in.

OPERATIONAL INSPECTION: Based upon usage, the pan strainer may become clogged with soil and debris as the workday progresses. Operators should regularly inspect the pan strainer to ensure it has not become clogged. If the strainer does become clogged, it will reduce the washing capability of the machine. Instruct operators to clean out the pan strainer at regular intervals or as required by work load.

SHUTDOWN AND CLEANING: At the end of the workday, remove the pan strainer and clean as required. Wipe out the inside of the Side Loader and then reinsert the strainer.

SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

DISHMACHINE OPERATING INSTRUCTIONS

PREPARATION: Before proceeding with the start-up of the unit, verify the following:

1. Close door(s) on dishmachine.
2. Close the drain valve(s).

POWER UP (ELECTRICALLY-HEATED MODELS): To energize the unit, turn on the power at the service breaker. The voltage should have been previously verified as being correct. If not, the voltage will have to be verified.

POWER UP (GAS-HEATED MODELS): To energize the unit, turn on the power at the service breaker. The voltage should have been previously verified as being correct. If not, the voltage will have to be verified. Ensure that the gas service is connected and that gas is flowing to the machine. Without gas, the water will not reach the required minimum temperatures that the machine is designed to operate at.

POWER UP (STEAM-HEATED MODELS): To energize the unit, turn on the power at the service breaker. The voltage should have been previously verified as being correct. If not, the voltage will have to be verified. Ensure that the steam service is connected and that steam is flowing to the machine. Without steam, the water will not reach the required minimum temperatures that the machine is designed to operate at.

FILLING THE WASH TUB: Ensure that the delime switch is in the NORMAL position, and place the power switch into the ON position. The machine should fill automatically and shut off when the appropriate level is reached (just below the pan strainer). The wash tub must be completely filled before operating the wash pump to prevent damage to the component. Once the wash tub is filled, the unit is ready for operation.

Machines equipped with prewash sections should not be run without water in those sections. This can cause damage to components.

WARE PREPARATION: Proper preparation of ware will help ensure good results and less re-washes. If not done properly, ware may not come out clean and the efficiency of the dishmachine will be reduced. It is important to remember that a dishmachine is not a garbage disposal and that simply throwing unscraped dishes into the machine simply defeats the purpose altogether of washing the ware. Scraps should be removed from ware prior to being loaded into a rack. Pre-rinsing and pre-soaking are good ideas, especially for silverware and casserole dishes. Place cups and glasses upside down in racks so that they do not hold water during the cycle. The dishmachine is meant not only to clean, but to sanitize as well, to destroy all of the bacteria that could be harmful to human beings. In order to do this, ware must be properly prepared prior to being placed in the machine.

DAILY MACHINE PREPARATION: Refer to the section entitled “PREPARATION” at the top of this page and follow the instructions there. Afterwards, check that all of the chemical levels are correct and/or that there is plenty of detergent available for the expected workload.

WASHING A RACK OF WARE: To wash a rack, simply slide a rack of soiled ware into the load end of the machine. Once the the machine is started, it should pull the rack through the machine and push it out the unload end. Once a rack has started through, you may put another rack in.

OPERATIONAL INSPECTION: Based upon usage, the pan strainers may become clogged with soil and debris as the workday progresses. Operators should regularly inspect the pan strainers to ensure they have not become clogged. If the strainers do, they will reduce the washing capability of the machine. Instruct operators to clean out the pan strainers at regular intervals or as required by work load.

NOTE: On units equipped with prewash sections (AJ-66 & AJ-80), operators should also take the time to inspect the prewash section strainers and clean them as required by workload.

SHUTDOWN AND CLEANING (ELECTRICALLY-HEATED MODELS): At the end of the workday, place the power switch in the OFF position and open the door(s). Open the drain valves and allow the machine to drain completely. Remove the pawl bar assembly (clean as required). Remove the pan strainers and, if equipped, the prewash strainers, run off sheets and scrap basket strainer. Remove the wash and, if equipped, the prewash arms and verify that the nozzles and arms are free from obstructions. Flush the arms with fresh water. Remove the pump suction strainers and clean out as required. Remove the rinse tray assembly and clean. Remove the curtains and scrub with a mild detergent and warm water. Wipe out the inside of the unit and then reassemble with the components previously removed.

SHUTDOWN AND CLEANING (GAS-HEATED MODELS): At the end of the work day, shut down the gas booster in accordance with manufacturer's instructions. Place the power switch in the OFF position, secure the flow to the machine and open the door(s). Open the drain valves and allow the machine to drain completely. Remove the pawl bar assembly (clean as required). Remove the pan strainers and, if equipped, the prewash strainers, run off sheets and scrap basket strainer. Remove the wash and, if equipped, the prewash arms and verify that the nozzles and arms are free from obstructions. Flush the arms with fresh water. Remove the pump suction strainers and clean out as required. Remove the rinse tray assembly and clean. Remove the curtains and scrub with a mild detergent and warm water. Wipe out the inside of the unit and then reassemble with the components previously removed.

SHUTDOWN AND CLEANING (STEAM-HEATED MODELS): At the end of the workday, place the power switch in the OFF position, secure the flow of steam to the machine and open the door(s). Open the drain valves and allow the machine to drain completely. Remove the pawl bar assembly (clean as required). Remove the pan strainers and, if equipped, the prewash strainers, run off sheets and scrap basket strainer. Remove the wash and, if equipped, the prewash arms and verify that the nozzles and arms are free from obstructions. Flush the arms with fresh water. Remove the pump suction strainers and clean out as required. Remove the rinse tray assembly and clean. Remove the curtains and scrub with a mild detergent and warm water. Wipe out the inside of the unit and then reassemble with the components previously removed.

DETERGENT CONTROL

Detergent usage and water hardness are two factors that contribute greatly to how efficiently your dishmachine will operate. Using detergent in the proper amount can become, in time, a source of substantial savings. A qualified water treatment specialist can tell you what is needed for maximum efficiency from your detergent, but you should still know some basics so you'll understand what they are talking about.

First, you must understand that hard water greatly effects the performance of the dishmachine. Water hardness is the amount of dissolved calcium and magnesium in the water supply. The more dissolved solids in the water, the greater the water hardness. Hard water works against detergent, thereby causing the amount of detergent required for washing to increase. As you use more detergent, your costs for operating the dishmachine will increase and the results will decrease. The solids in hard water also may build-up as a scale on wash and rinse heaters, decreasing their ability to heat water. Water temperature is important in removing soil and sanitizing dishes. If the water cannot get hot enough, your results may not be satisfactory. This is why Jackson recommends that if you have installed the machine in an area with hard water, that you also install some type of water treatment equipment to help remove the dissolved solids from the water before it gets to the dishmachine.

Second, hard water may have you adding drying agents to your operating cycle to prevent spotting, when the real problem is deposited solids on your ware. As the water evaporates off of the ware, the solids will be left behind to form the spotting and no amount of drying agent will prevent this. Again, using treated water will undoubtedly reduce the occurrences of this problem.

Third, treated water may not be suitable for use in other areas of your operation. For instance, coffee made with soft water may have an acid or bitter flavor. It may only be feasible to install a small treatment unit for the water going into the dishmachine itself. Discuss this option with your qualified water treatment specialist.

Even after the water hardness problems have been solved, there still must be proper training of dishmachine operators in how much detergent is to be used per cycle. Talk with your water treatment specialist and detergent vendor and come up with a complete training program for operators. Using too much detergent has as detrimental effects as using too little. The proper amount of detergent must be used for job. It is important to remember that certain menu items may require extra detergent by their nature and personnel need to be made aware of this. Experience in using the dishmachine under a variety of conditions, along with good training in the operation of the machine, can go a long way in ensuring your dishmachine operates as efficiently as possible.

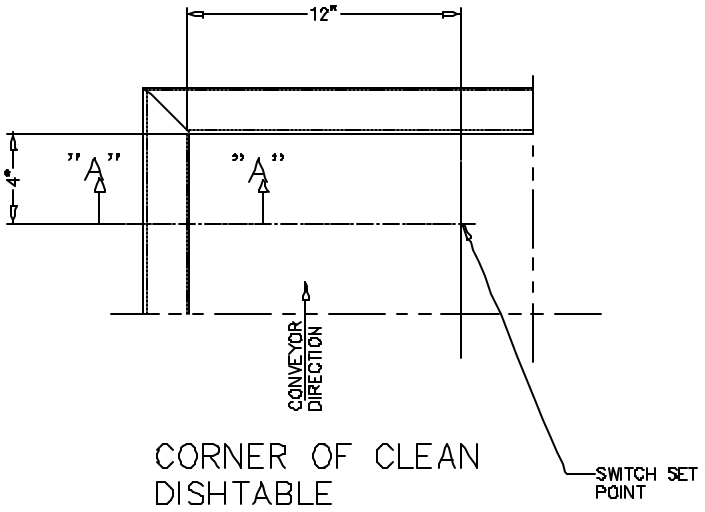
Certain dishmachine models require that chemicals be provided for proper operation and sanitization. Some models even require the installation of third-party chemical feeders to introduce those chemicals to the machine. Jackson does not recommend or endorse any brand name of chemicals or chemical dispensing equipment. Contact your local chemical distributor for questions concerning these subjects.

Some dishmachines come equipped with integral solid detergent dispensers. These dispensers are designed to accommodate detergents in a certain sized container. If you have such a unit, remember to explain this to your chemical distributor upon first contacting them.

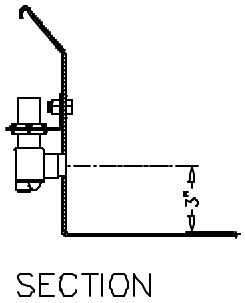
As explained before, water temperature is an important factor in ensuring that your dishmachine functions properly. The data plate located on each unit details what the minimum temperatures must be for either the incoming water supply, the wash tank and the rinse tank, depending on what model of dishmachine you have installed. These temperatures may also be followed by temperatures that Jackson recommends to ensure the highest performance from you dishmachine. However, if the minimum requirements are not met, the chances are your dishes will not be clean or sanitized. Remember, a dish can look clean, but it may not be sanitized. Instruct your dishmachine operators to observe the required temperatures and to report when they fall below the minimum allowed. A loss of temperature can indicate a much larger problem such as a failed heater or it could also indicate that the hot water heater for your operation is not up to capacity and a larger one may need to be installed.

There are several factors to consider when installing your dishmachine to ensure that you get the best possible results from it and that it operates at peak efficiency for many years. Discuss your concerns with your local chemical distributor and water treatment specialist before there is a problem.

PHOTOELECTRIC LIMIT SWITCH INSTALLATION INSTRUCTIONS



CORNER OF CLEAN DISHTABLE



SECTION

Installation Instructions:

1. Locate and drill a 3/4" diameter hole through the back of the dishtable, 4" from the end and 3" above the surface of the table.

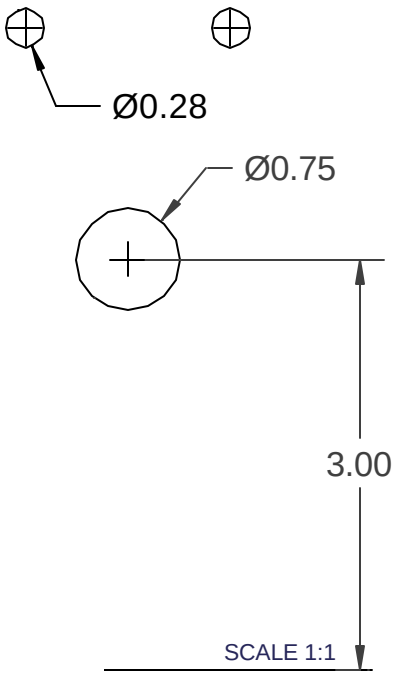
2. Using the switch mounting bracket template (a photocopy of it may prove beneficial), locate and drill the 9/32" diameter hole on either side of the 3/4" hole.

3. Mount the switch bracket to the outside of the dishtable using the 1/4"-20 hardware supplied. The cable entering the switch body should be pointing upwards so that the switch sensitivity adjustment screw is downward for adjusting from the underside of the table.

4. Wiring instructions:
White wire from the conveyor control panel to red/black wire from proximity switch.
Door switch wire from the conveyor control panel to the black wire from the proximity switch.
Black/white wire from the conveyor control panel to the red/white wire from the proximity switch.

5. Adjust the sensitivity of the proximity switch by turning the adjustment screw on the switch. The proper setting is reached when the switch will sense an object approximately 12" from the switch.

BRACKET MOUNTING TEMPLATE



Unless noted, all dimensions are in inches.

STRIKER PLATE LIMIT SWITCH INSTALLATION INSTRUCTIONS

Installation Instructions:

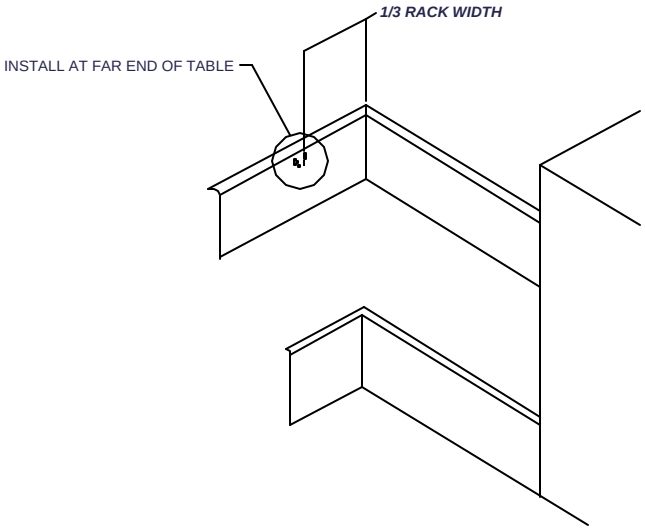
1. Wiring: The switch is wired common and normally open because of the hinge design. By interrupting the line in series with the door switches, the dishmachine ceases to operate. Refer to the machine schematic for details on how to wire the switch.

2. Parts of the table switch are mounted in the dishtable, at the end of the table and under the table. See the drawing(s) for the relationship of the switch to the table.

3. Move the limit switch as far down on the two slots as possible and see that the limit switch is straight on the base plate. This might require adjustment of the nut on the connector for the limit switch.

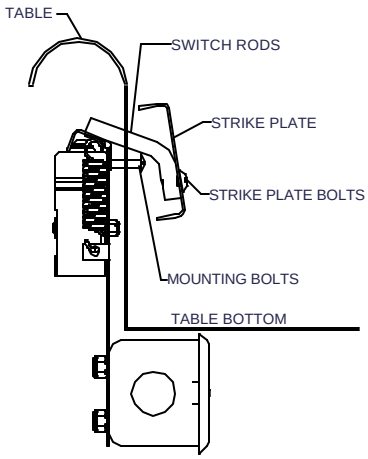
4. Then adjust the inside and the outside connector nuts for the connector box so that it lines up even with the limit switch and the base plate.

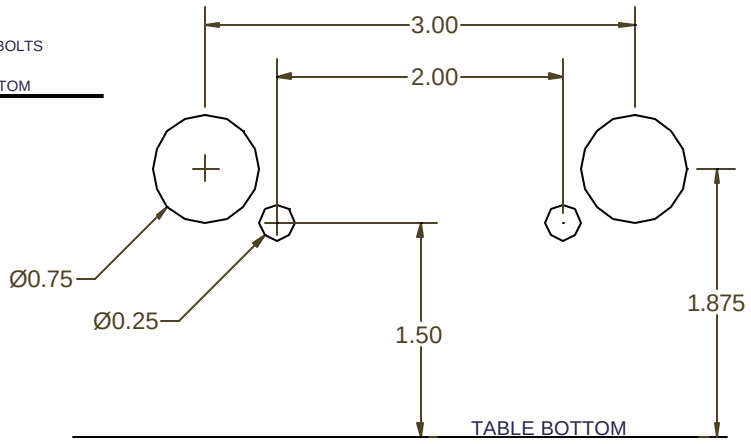
5. Tighten down the nuts for the seal so that they are tight.



6. If you have any difficulty you might have to adjust the connectors to the seal, screwing in or screwing out until the installation is straight on the table and the limit switch is actuated correctly by the rack.

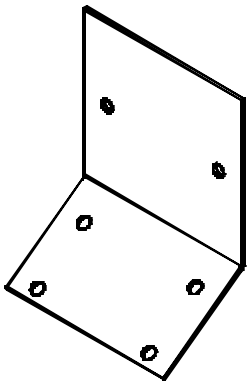
TABLE LIMIT SWITCH THROUGH ROD HOLES



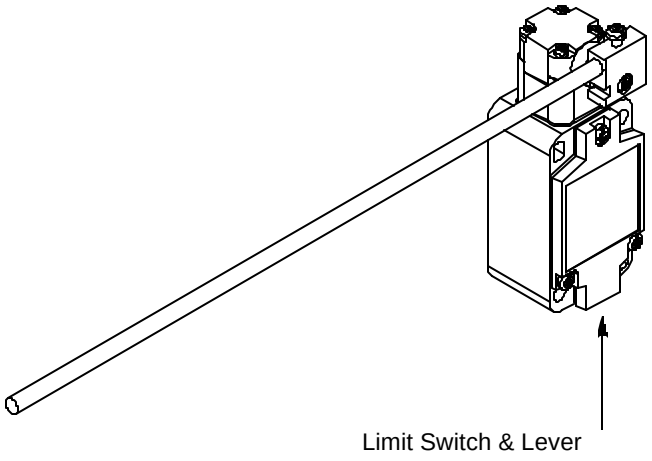


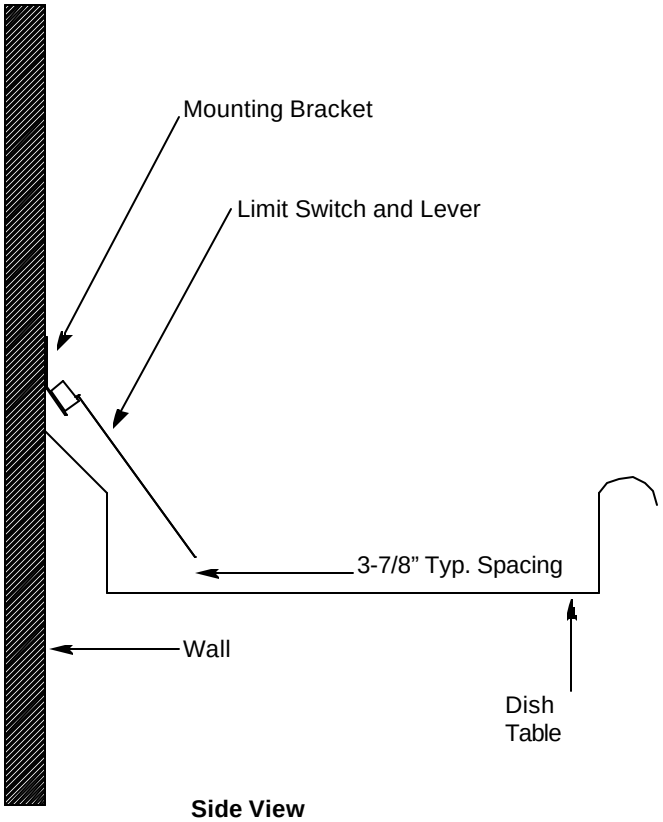
Unless noted, all dimensions are in inches.

WHISKER LIMIT SWITCH INSTALLATION INSTRUCTIONS

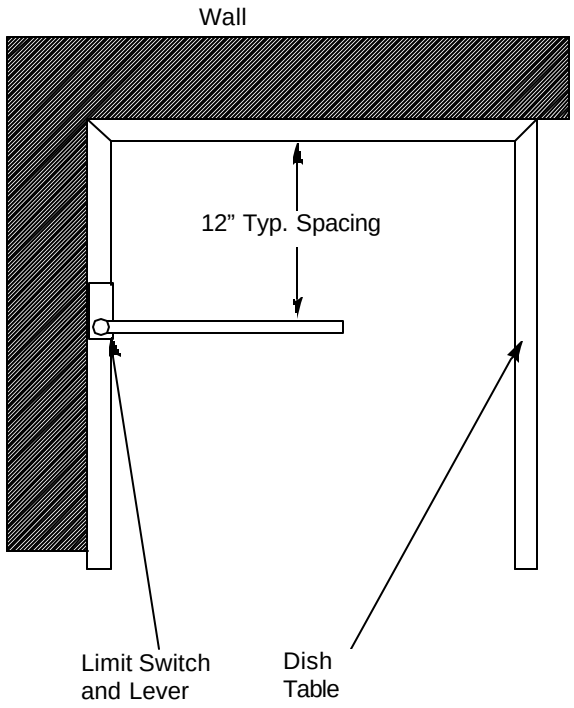


Switch Mounting Bracket





Side View



Top View

Installation Instructions:

1. Wiring: Refer to the machine schematic.
2. Mounting: Mount the switch as indicated in the drawing(s) above.

SECTION 3:
PREVENTATIVE MAINTENANCE

SECTION 3: PREVENTATIVE MAINTENANCE

PREVENTATIVE MAINTENANCE

The dishmachines covered in this manual are designed to operate with a minimum of interaction with the operator. However, this does not mean that some items will not wear out in time. Jackson highly recommends that any maintenance and repairs not specifically discussed in this manual should be performed by QUALIFIED SERVICE PERSONNEL ONLY. Performing maintenance on your dishmachine may void your warranty if it is still in effect, so if you have a question or concern, do not hesitate to contact Jackson.

There are many things that operators can do to prevent catastrophic damage to the dishmachine. One of the major causes of component failure has to do with prescrapping procedures. A dishmachine is not a garbage disposal; any large pieces of material that are put into the machine shall remain in the machine until they are either broken up (after spreading out on your ware!) or physically removed. Strainers are installed to help catch debris, but they do no good if they are clogged. Have operators regularly inspect the pan strainers to ensure (1) that they are free of soil and debris and (2) they are laying flat in the tub.

When cleaning out strainers, do NOT beat them on waste cans. The strainers are made of metal and can be forgiving; but once severe damage is done, it is next to impossible for the strainer to work in the way it was designed to. Wipe out strainers with a rag and rinse under a faucet if necessary. For stubborn debris, a toothpick should be able to dislodge any obstructions from the perforations. Always ensure that strainers are placed back in the machine before operation and that they lay flat in the tub.

You may wish to also refer to the page entitled “Detergent Control” in order to learn more about how your water hardness will effect the performance of your machine. Hard water makes dishmachines work harder and decreases efficiency.

Again, it is important to remind operators that trying to perform corrective maintenance on the dishmachine could lead to larger problems or even cause harm to the operator. If a problem is discovered; secure the dishmachine using proper shut down procedures as listed in this manual and contact Jackson.

Some problems, however, may having nothing to do with the machine itself and no amount of preventative maintenance is going to help. A common problem has to do with temperatures being too low. Verify that the water temperatures coming to your dishmachine match the requirements listed on the machine data plate. There can be a variety of reasons why your water temperature could be too low and you should discuss it with Jackson to determine what can be done.

By following the operating and cleaning instructions in this manual, you should get the most efficient results from your machine. As a reminder, here are some steps to take to ensure that you are using the dishmachine the way it was designed to work:

1. Ensure that the water temperatures match those listed on the machine data plate.
2. Ensure that all strainers are in place before operating the machine.
3. Ensure that all wash and/or rinse arms are secure in the machine before operating.
4. Ensure that drains are closed/sealed before operating.
5. Remove as much soil from dishes by hand as possible before loading into racks.
6. Do not overfill racks.
7. Ensure that glasses are placed upside down in the rack.
8. Ensure that all chemicals being injected to machine have been verified as being at the correct concentrations.
9. Clean out the machine at the end of every workday as per the instructions in the manual.
10. Always contact Jackson whenever a serious problem arises.
11. Follow all safety procedures, whether listed in this manual or put forth by local, state or national codes/regulations.

SECTION 3: PREVENTATIVE MAINTENANCE

DRIVE MOTOR GEAR REDUCER PREVENTATIVE MAINTENANCE

Note: The maintenance procedures detailed here are manufacturer's instructions for the WINSMITH brand of gear reducer that is installed on the rack conveyors covered in this manual.

Lubrication & Maintenance:

Factory filling - WINSMITH speed reducers are oil filled at the factory to the proper level for the standard mounting position that you will find it in on the unit. The oil level should be checked and adjusted (if necessary) prior to operation, using the oil level plug provided and while the unit is oriented in its operating position.

Ambient temperature - If the operating ambient temperature is other than 51 - 95°F, then refer to the lubrication chart and refill the unit with the correct grade based on actual ambient temperature and operating speed. See "Oil changing" below for additional information.

Oil changing - When changing the oil for any reason, it should be remembered that oils of various types may not be compatible. Therefore, when changing to a different oil, it is recommended that the housing be completely drained and thoroughly flushed with a light flushing oil prior to refilling with the appropriate lubricant. The oil level should be rechecked after a short period of operation and adjusted, if necessary. When changing double reduction models, each housing should be drained and filled independently, even though there may be a common level.

Initial oil change: The new oil in a speed reducer should be changed at the end of 250 hours of operation. This is equivalent to 30 days of operation for 8 hours per day; 15 days of operation for 16 hours per day, or 10 days of operation for 24 hours per day.

Subsequent oil changes: Under normal conditions, after the initial oil change, the oil should be changed after every 2500 hours of operation, or every 6 months, whichever occurs first. Under severe conditions (rapid temperature changes, moist, dirty or corrosive environment) it may be necessary to change oil at intervals of one to three months. Periodic examination of oil samples taken from the unit will help establish the appropriate interval.

Synthetic oils: Synthetic lubricants can be advantageous over mineral oils in that they generally are more stable, have a much longer life, and operate over a wider temperature range. These oils are appropriate for any application but are especially useful when units are subjected to low start-up temperatures or high operating temperatures. However, continuous operation above 225°F may cause damage to seals or other components. It is recommended that the initial oil be changed or filtered after the first 1500 hours of operation to remove metal particles that accumulate during break-in. Subsequent oil changes should be made after 5000 hours operation if units are operating in a clean environment. This can be extended to 10,000 hours if using new reformulated Mobil SHC lubricants (orange in color) and the lubricant remains free of contamination over this period. See comments under "Subsequent oil changes" for discussion of severe ambient conditions.

Long term storage or infrequent operation: If a speed reducer is to stand idle for an extended period of time, either prior to installation or during use, it is recommended that the unit be filled completely with oil to protect interior parts from rust and corrosion due to internal condensation. Be sure to drain the oil to the proper level before placing the speed reducer in service.

Grease fittings: Some units are equipped with grease fittings to lubricate bearings not adequately lubricated by the oil splash. These fittings must be lubricated every 3 - 6 months depending on operating conditions. bearing greases must be compatible with the type of gear lubricant being used (i.e. mineral, synthetic, food grade, etc.). For mineral oils, use a high quality lithium base NLGOI #2 bearing grease. For synthetic oils, use a synthetic bearing grease such as Mobil Synthetic Universal grease, Mobilith SHC 100 or a suitable equivalent. For food grade lubricants, use Chevron FM grease, NGLI 2, or equivalent.

Low input speeds (under 1600 RPM): When input speeds are less than 1600 RPM, grease fittings will be required to lubricate any bearings not partially covered by the normal oil level.

Oil temperature: Speed reducers in normal operation can generate temperatures up to 200°F depending on the type of reducer and the severity of the application 9loading, duration of service, ambient temperatures). Excessive oil temperatures may be the result of several factors including overloading, overfilling, underfilling or inadequate cooling.

	Nominal Ratio											
Size	**5**	**7.5**	**10**	**15**	**20**	**25**	**30**	**40**	**50**	**60**	**80**	**100**
920	0.347	0.263	0.225	0.216	0.202	0.191	0.215	0.200	0.188	0.182	0.164	0.161

Lubricant selections are provided by the lubricant manufacturer based on AGMA recommended viscosity grades. Viscosity grades are based on Lubrication Standard ANSI/AGMA 9005-D94.

SECTION 4:
TROUBLESHOOTING SECTION

SECTION 4: TROUBLESHOOTING

COMMON PROBLEMS

WARNING: Inspection, testing and repair of electrical equipment should be performed only by qualified service personnel. Certain procedures in this section require electrical tests or measurements while power is applied to the machine. **Exercise extreme caution at all times.** If test points are not easily accessible, disconnect power, attach test equipment and reapply power to test. When replacing electrical parts, disconnect power at source circuit breaker

Problem: Nothing on dishmachine operates. The power switch is ON and the power indicator light is OFF.

1. Machine is not wired correctly to incoming power source. Have an electrician verify wiring.
2. Machine circuit breaker is tripped. Reset the circuit breaker. If it trips again, contact an electrician to verify the machine amp draw.
3. Service breaker is tripped. Reset the service breaker. If it trips again, contact an electrician to verify the machine amp draw.

Problem: Machine will not fill. The power switch is ON and the power indicator light is ON.

1. No water supply to machine. Verify that water lines have been connected to the machine.
2. Dishmachine doors are not closed. Close doors completely.
3. Incoming water solenoid valve damaged/faulty. Verify that the valve is operating. If not, replace.
4. Tank floats faulty. Verify the wiring of the floats. Verify that no debris is jamming the floats. Replace if necessary.

Problem: Machine fills, but fill is weak.

1. Low incoming water pressure. Verify that incoming water pressure during fill is 20 $\pm$5 PSI.
2. Incoming water solenoid is clogged. Verify that debris is not entrapped in valve. If so, remove debris.

Problem: Low wash tank temperature.

1. Low incoming water temperature. Verify that the incoming water temperature matches what is indicated on the machine data plate.
2. Heater not energizing. Verify that the wash tank heater is operating. If not, replace.
3. Low incoming voltage. Have an electrician verify that the power coming to the machine is the same as indicated on the data plate.

Problem: Low wash arm pressure, poor spray pattern.

1. Clogged wash arm nozzles. Verify that nozzles are not clogged with debris. If so, remove debris.
2. Clogged wash tank or wash pump strainers. Clean out strainers if necessary.
3. Worn wash pump impeller. Verify status of impeller, replace if necessary.

Problem: Low prewash arm pressure, poor spray pattern.

1. Clogged prewash arm nozzles. Verify that nozzles are not clogged with debris. If so, remove debris.
2. Clogged prewash tank or prewash pump strainers. Clean out strainers if necessary.
3. Worn prewash pump impeller. Verify status of impeller, replace if necessary.

Problem: Inadequate rinse.

1. Low incoming water pressure. Verify that incoming water pressure during fill is 20 $\pm$5 PSI.
2. Incoming water solenoid is clogged. Verify that debris is not entrapped in valve. If so, remove debris.

Problem: Pawl bar moves with no load, but does not move when loaded.

1. Clutch on drive assembly is out of adjustment. Adjust as required.

SECTION 4: TROUBLESHOOTING

COMMON PROBLEMS

Problem: Pawl bar does not move.

1. Failed or broken overload spring. Replace spring if necessary.
2. No power to the drive motor/failed drive motor. Verify power and wiring connections to the motor. If necessary, replace the motor.
3. Pawl bar not properly installed. Verify that the pawl bar is installed correctly.

Problem: Racks go through the machine, but results are poor.

1. Verify that detergent is being dispensed into the machine at the appropriate quantities for the water volume. If not, get detergent to appropriate level and review results of washing ware.
2. Clogged strainers/scrap basket. Clean out strainers and scrap basket and replace.
3. Ware not being properly prescrapped. Review paragraph entitled “Ware Preparation” in Operating Instructions.
4. Wash or rinse arms missing end plugs or caps. Verify and replace as required.
5. Low tank heat.
6. Inadequate rinse.
7. Incorrect voltage coming to the machine. Verify that the voltage matches that on the machine data plate.
8. Wash pump cavitation due to low water level. Verify that the drains are shut and that the water level is correct.

Problem: Spotting of silverware, glasses and dishes.

1. Incorrect final rinse temperature. Verify that the rinse water temperature matches that which is listed on the machine data plate.
2. Clogged wash and/or rinse nozzles and arms. Remove the arms and verify that they and their nozzles are from debris.
3. Excessively hard water. Install a water softener to reduce hardness.
4. Loss of water pressure due to clogged/obstructed wash pump. Turn the power off to the machine at the source. Drain the wash tank of water and verify that the pump intake is free from debris.
5. Improper scrapping procedures. Review the paragraph entitled “Ware Preparation” in Operating Instructions.
6. incorrect detergent/chemical concentrations. Verify that the detergent/chemical concentrations are correct for the associated water volume.

TORQUE SETTINGS

When replacing components either in the control box or the heater box area, the manufacturer has suggestions on how much to torque the screws and nuts used in securing items to the machine. Refer to the table below for the torque specifications:

ITEMS	TORQUE SPEC
Relays	16 In/lbs
Heater Contactor	35 In/lbs
Heater Nuts	16 In/lbs
Terminal Block	50 In/lbs

SECTION 5:
SERVICE PROCEDURES

REPLACING THE PUMP GASKET & SEAL

These rack conveyor machines come equipped with powerful motors and pumps to ensure ware washing results. Occasionally, some of the parts on these components may need replacing to maintain optimum performance. Two components in particular are the wash pump gasket and the mechanical seal.

The instructions provided here are for maintenance personnel only. Unauthorized persons should not attempt any of the steps contained in these instructions.

Warning: many of the instructions and steps within this document require the use of tools. Only authorized personnel should ever perform any maintenance procedure on the dishmachine!

PREPARATION

1. Power must be secured to the unit at the service breaker. Tag or lock out the service breaker to prevent accidental or unauthorized energizing of the machine.
2. Ensure that incoming water to the machine is secured either by use of a shut-off valve or disconnecting the incoming water line.
3. Ensure that the dishmachine has been completely drained of water and has been allowed to cool down prior to beginning this maintenance procedure.

TOOLS REQUIRED

The following tools will be needed to perform this maintenance evolution:

1. 7/16” socket and ratchet with extension
2. 9/16” socket and ratchet with extension
3. 5/16” Allen wrench
4. 5/16” nutdriver
5. Large flathead screwdriver

TIME REQUIRED

It is estimated that it will take (1) person one and a half hours to perform this task, not including all of the items indicated in the section entitled “PREPARATION”.

IMPORTANT NOTES

1. Read these instructions thoroughly before attempting this maintenance procedure. Become familiar with the parts and what actions need to be taken. This will save time in the long run!
2. The procedures demonstrated in this manual are shown being performed on an ES-4400 rack conveyor dishmachine. The actual maintenance steps, however, apply to any wash, prewash or power rinse motor found on an Ecolab rack conveyor dishmachine.

STEPS

1. **Note:** in this procedure, it is not necessary to always remove the wiring from the motor. However, the motor should be treated with the greatest of care when being pulled away and set on the floor for maintenance, as demonstrated in these instructions.

2. Remove the (4) nuts holding the mounting plate in position.

Removing the mounting plate nuts with the 9/16” socket

3. Loosen the band clamp on the back end of the motor.

Loosening the band clamp on the back end of the motor.

4. With the band clamp loosened, carefully remove it from the back end of the motor. Once the clamp is removed, examine it to determine if it needs to be replaced as well. If it is broken in any spots or shows signs of metal fatigue, it is best to order a new one. The purpose of the clamp and the attached support bracket is to keep the weight of the motor from pulling on the tub, damaging it. It is absolutely necessary that this component be replaced once the maintenance procedure is completed.

Removing the rear clamp

5. Remove the motor support bracket.

Removing the motor support bracket

6. With the motor support bracket removed, gently pull back on the motor. You may have to move it from side to side, but it should start to move back. Pull it completely away from the mounting studs on the tub and set down gently to work on it.

7. Remove the gasket from the tub. If you are going to replace it with a new one, do so at this time. Otherwise, carefully examine the gasket for tears and other damage. If it is acceptable, set to the side. If you are not going to replace the seal, go to step 16.

Removing the pump gasket

8. Using a large screwdriver (flathead preferred, but a phillip-shead will work just as well) and the 7/16" socket, loosen and then remove the bolt holding the impeller to motor shaft. Refer to the picture below.

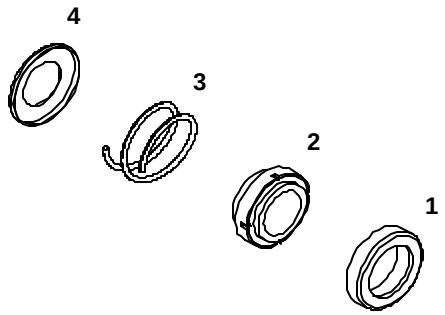
Removing the bolt that holds the impeller to the shaft

9. With the bolt and washer removed, grasp the sides of the impeller and pull up gently. The impeller should slide off of the shaft. Remove the woodruff key as well and set to the side.

Removing the impeller

Removing the woodruff key

10. Note that the mechanical seal will consist of the following parts:



1. A rubber seal with a ceramic ring set inside it that will seat in the center of the mounting plate.

2. A rubber seal with a stainless steel covering on the outside that seals the motor shaft and seats against the ceramic ring.

3. A spring.

4. A stainless steel spring cap to capture the top of the spring and hold it in place.

11. Most of the mechanical seal should simply come off, leaving the rubber seal with the ceramic ring inside the pump mounting plate.

12. Using a screwdriver, pry out the remaining part of the mechanical seal, taking care not to score or damage the motor shaft.

13. Once the hole is free of any parts of the mechanical seal, verify that the hole is clean and free of debris.

14.Gently press the new seal and ceramic over the shaft and slide down into the mounting plate hole. NOTE: Do not touch the surface of the seal with your bare fingers; place a rag or paper towel between your fingers and the seal. Gently slide the shaft seal over the shaft and push it down against the mounting plate seal. Place the spring and cap over the shaft.

15. Place the woodruff key back into the groove of the motor shaft and re-install the impeller, being careful to align the woodruff key with the slot in the impeller. Replace the bolt and washer, then tighten.

16. Install the motor by placing it on the studs and sliding it forward until it is against the wash tank wall. Replace the nuts and washers and tighten.

17. Re-install the pump motor support bracket and tighten down the nuts used to secure it to the tub.

18. Replace the band clamp on the motor and support bracket, tighten until snug.

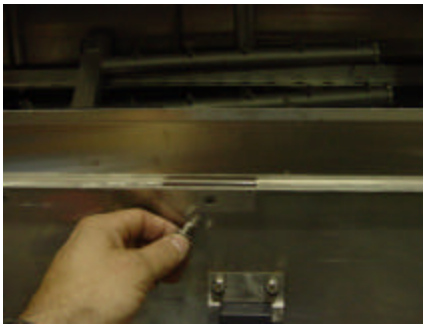
AFTER MAINTENANCE ACTIONS

Reconnect the incoming water (if disconnected) and turn on. Then restore power to the unit. Run the unit for at least 10 minutes to ensure there are no leaks. If you hear any grinding sounds while the motor is running, immediately shut off the unit and secure power and water. There is a serious problem that must be addressed. If any problems arise you can contact your Ecolab representative.

SPECIAL PARTS

Mechanical Seal
Part number 06401-003-06-73
Motor Mounting Gasket
Part number 06401-003-06-75
Motor Support Clamp
Part number 04730-002-32-15

First, remove three bolts, locknuts and flat washers at middle hood/tub junction.



Next, remove door splash shield.

Then, install new rack rail stabilizer using the three bolts, locknuts and flat washers.

Rack Rail Stabilizer
05700-011-34-63

RINSE SOLENOID VALVE REPAIR PARTS KIT

These dishmachines are equipped with electrical solenoid valves to allow for automatic fill and rinse. These valves are designed to specific tolerances and design aspects that must be met in order to function properly.

Ecolab offers repair kits for replacing some of the wear items associated with solenoid valves which will allow you to save money in that replacement of these parts can take place *without* removing the solenoid valve from the plumbing assembly.

The instructions provided here are for maintenance personnel only. Unauthorized persons should not attempt any of the steps contained in these instructions.

Warning: many of the instructions and steps within this document require the use of tools. Only authorized personnel should ever perform any maintenance procedure on the dishmachine!

PREPARATION

1. Power must be secured to the unit at the service breaker. Tag or lock out the service breaker to prevent accidental or unauthorized energizing of the machine.

2. Ensure that incoming water to the machine is secured either by use of a shut-off valve or disconnecting the incoming water line.

TOOLS REQUIRED

The following tools will be needed to perform this maintenance evolution:

1. Small flathead screwdriver
2. Medium flathead screwdriver
2. Needle nose pliers
3. 5/16” nutdriver
4. Channel locks
5. 12” pipe wrench

TIME REQUIRED

It is estimated that it will take (1) person twenty minutes to perform this task, not including all of the items indicated in the section entitled “PREPARATION”.

IMPORTANT NOTES

1. Read these instructions thoroughly before attempting this maintenance evolution. Become familiar with the parts and what actions need to be taken. This will save time in the long run!

2. The procedures demonstrated in this manual are shown being performed on an AJ-44C rack conveyor dishmachine. The actual maintenance steps, however, apply to any Parker style solenoid valve found on a Ecolab dishmachine.

STEPS

1. Remove the top screw with the 5/16” nutdriver. Remove the screw and the data plate and set to the side.

Removing the top screw

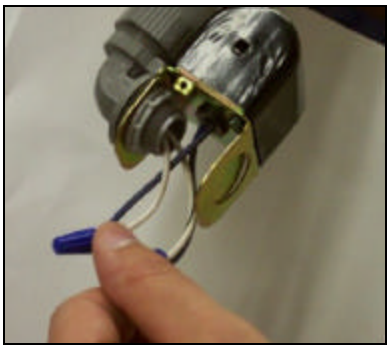
2. With the top screw and data plate removed, grasp the solenoid coil and gently pull up. The coil should slide up, allowing you to remove it from the valve bonnet. If you are wanting to replace the coil, continue on with Step 3. If you are wanting to replace some of the internal components of the valve, proceed to step 12.

Removing the coil

3. **NOTE:** Replacing the solenoid coil requires working with the wiring of your machine. It is important that all wiring maintenance be performed by qualified personnel. Always verify the wiring steps presented in this instruction with the schematic that shipped with the unit. A current schematic can also be found in the unit’s installation manual. Before beginning any step that involves working with wiring, ensure that the steps located in the section entitled “Preparation” have been performed. Power must be secured to the machine at the service breaker. Failure to do so could result in severe injury to maintenance personnel.

Prying open the coil wire cover

4. When replacing the coil, ensure that when removing the coil wire cover that care is taken not to damage the wires inside. Using the medium flathead screwdriver, gently use it to open the cover enough to where it could be pulled off.



Straightening the wires

5. Once the coil wire cover has been removed and set to the side, take the internal wires and pull them out straight.

Removing the wire nuts

6. Remove the wire nuts from the wires and separate them.

Loosening the conduit nut

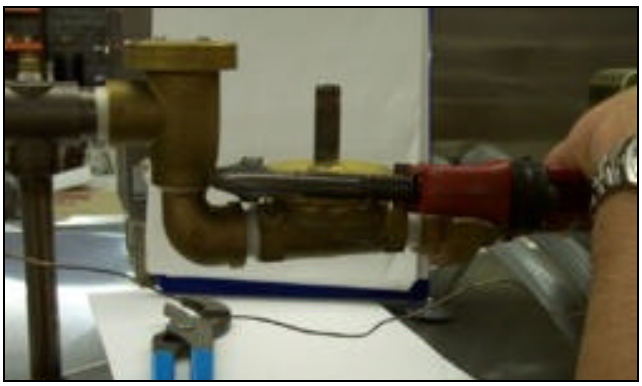
7. Using a pair of channel locks, gently loosen the conduit retaining ring for the conduit nut. Once it is loosened, use your fingers to unscrew and remove it.

8. Pull the conduit away and discard the bad coil. Take the new coil and attach the conduit, reinstall & tighten the conduit nut, and pull the wires through so that you will be able to wire the valve back up.

9. Reconnect the wires from the conduit to the wires from the solenoid as they had been connected previously. Ensure that the wire nuts are on tight.

10. Slide the coil wire cover back on, taking care not to damage the wires.

11. If you are done performing maintenance on the valve, continue on to step 23. Otherwise, please go on to step 12.L

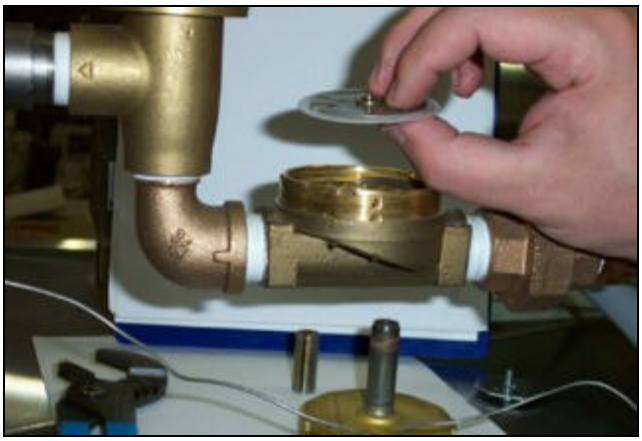


Loosening the valve bonnet

12. To remove the valve bonnet, grasp it with the jaws of the pipe wrench and turn to the left. **Note:** on some models you may have to remove the valve in order to perform this and any further steps. Be careful not to damage the plumbing assembly. Only use the pipe wrench enough to where you can spin the valve bonnet off with your hand.

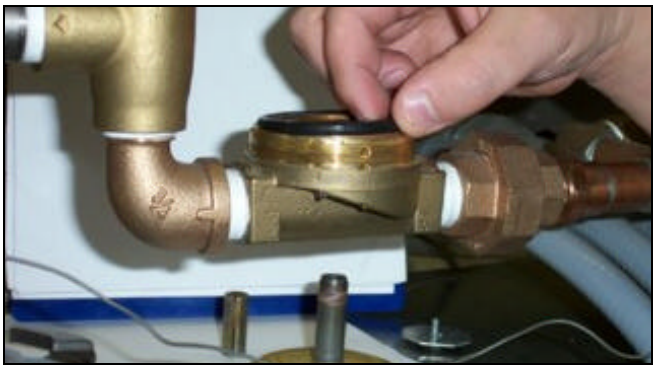
Removing the valve bonnet

13. Slowly remove the valve bonnet. **Note:** The spring for the plunger is located directly under the bonnet and may come free if you are not careful. Remove the plunger, spring and valve bonnet and place to the side.



Removing the diaphragm

17. Remove the diaphragm retainer and then the diaphragm itself. Many problems associated with a solenoid valve can be traced to a clogged pilot port in the diaphragm.

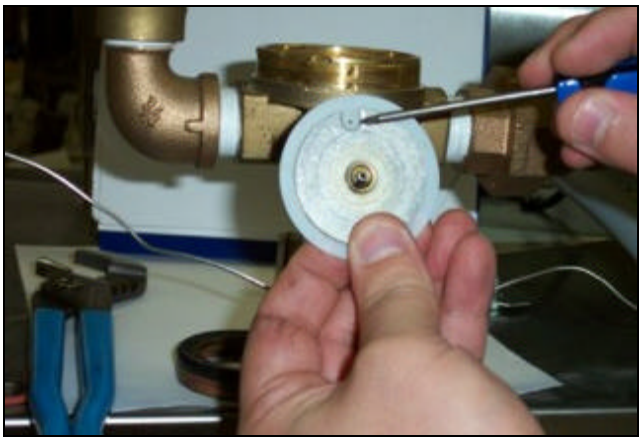


Removing the O-ring

14. Remove the O-ring and inspect it. If it has any tears or cuts or excessive flat spaces, it should be replaced.

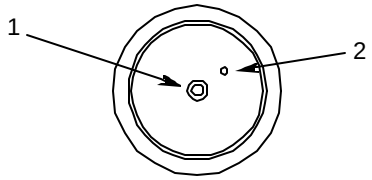
15. Examine the threads for the valve bonnet. Check them for scoring or signs of damage. Take a cloth and clean them out to remove any foreign particles that might get lodged in the threads and cause a leak. Severely damage threads should not be repaired; instead it is recommended that the entire valve should be replaced. These instructions do not provide information on replacing the solenoid valve.

16. **Note:** Even though an O-ring may not appear damaged, it is a good idea to go ahead and replace it if you have a new one. This will help ensure that your valve remains leak-free in the future!



Pointing out the extension hole

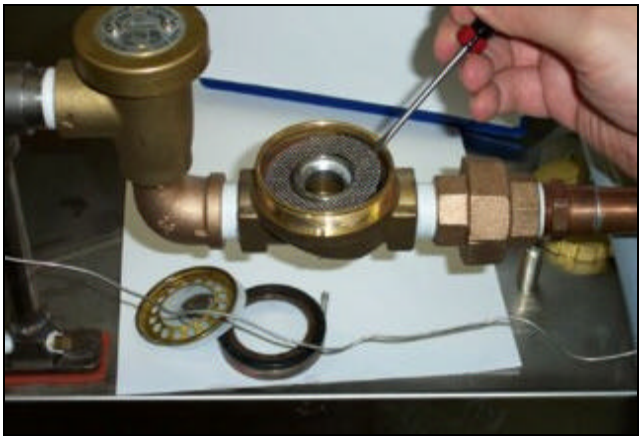
18. As indicated in the photo above, the extension hole can become clogged. If it is difficult to clean out, you can use a heated straight pin to push through the hole. The center hole, the pilot port, must also be clear. If the diaphragm is torn or bent in any way, it must be replaced.



Diaphragm showing (1) pilot port and (2) extension hole

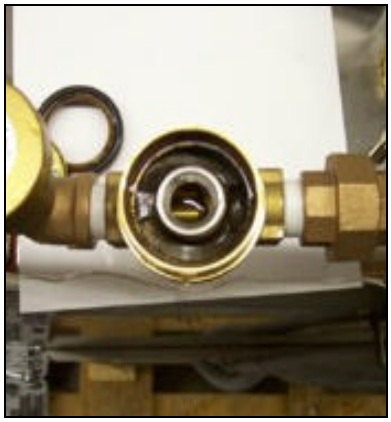
Removing the screen retainer

19. Using the small flathead screwdriver, lift out the screen retainer. Verify that the holes in it are free of clogs and debris.



Removing the mesh strainer screen

20. Again using the small flathead screwdriver, carefully remove the mesh screen from inside the valve body. The screen should be taken and rinsed out to remove any debris fouling it.



View inside the solenoid valve body

21. With the mesh screen removed, look down into the valve and verify it is not clogged. Remove any foreign objects from the valve body that would obstruct flow.

22. Reassemble the valve, reversing the steps needed to take it apart. Replace defective replacement parts with new parts from ordered kits. Ensure that components are sufficiently tightened to prevent leakage.

AFTER MAINTENANCE ACTIONS

Reconnect the incoming water (if disconnected) and turn on. Then restore power to the unit. Run the unit for at least 10 minutes to ensure there are no leaks. If any problems arise please contact your Ecolab representative.

SPECIAL PARTS

Solenoid Valve Plunger Kit
Includes plunger and spring
Part number 06401-003-07-40

Solenoid Valve Diaphragm Kit
Includes diaphragm and o-ring
Part number 06401-003-07-41 (1/2” NPT)

Solenoid Valve 110 Volt Coil and Housing Kit
Part number 06401-003-07-43

Complete Solenoid Valve
Part number 04810-100-12-18 (1/2”, 110 Volt)

These dishmachines are equipped with vacuum breakers to serve as back-flow prevention devices. ASSE requirements specify what type of back-flow prevention is necessary on dishmachines. Vacuum breakers, unlike air gaps, have certain parts that have specific tolerances and design aspects that must be met in order to function properly.

Ecolab offers repair kits for replacing some of the wear items associated with vacuum breakers which will allow you to save money in that replacement of these parts can take place *without* removing the vacuum breaker from the plumbing assembly.

The instructions provided here are for maintenance personnel only. Unauthorized persons should not attempt any of the steps contained in these instructions.

Warning: many of the instructions and steps within this document require the use of tools. Only authorized personnel should ever perform any maintenance procedure on the dishmachine!

PREPARATION

1. Power must be secured to the unit at the service breaker. Tag or lock out the service breaker to prevent accidental or unauthorized energizing of the machine.

2. Ensure that incoming water to the machine is secured either by use of a shut-off valve or disconnecting the incoming water line.

TOOLS REQUIRED

The following tools will be needed to perform this maintenance evolution:

1. Small flathead screwdriver
2. Needle nose pliers

TIME REQUIRED

It is estimated that it will take (1) person twenty minutes to perform this task, not including all of the items indicated in the section entitled “PREPARATION”.

IMPORTANT NOTES

1. Read these instructions thoroughly before attempting this maintenance evolution. Become familiar with the parts and what actions need to be taken. This will save time in the long run!

STEPS

1. **Note:** These instructions only apply to vacuum breakers (1/2” NPT and 3/4” NPT) as pictured below. The repair kits indicated in these instructions will only work on those style of back-flow preventers. If you have a machine with a different style of vacuum breaker, contact your Ecolab representative about replacement components.

Vacuum breaker

2. **Note:** Even though the photos in these instructions show a vacuum breaker that has been removed from the plumbing assembly, these maintenance steps could be performed with it installed so long as the requirements in the section entitled “PREPARATION” have been met.

3. Remove the top cap by gripping firmly and turning to the left. The cap should come off after a few turns.

Removing the cap

4. Set the cap to the side.

5. Using the needle nose pliers, gently lift out the plunger and set to the side. Examine the brass seating surface inside the vacuum breaker. The plunger is required to sit flat on this surface so it must be free of defects, imperfections and the like. If there is debris, remove it. If it is chipped or cracked then the vacuum breaker must be replaced. Failure to do so may result in the vacuum breaker not working according to its design and could result in damage to the dishmachine.

Removing the plunger

6. Your repair kit comes with a new plunger. Examine the old one and ensure that the mating surface is not damaged or cut. Also inspect the rubber seal on the top of the plunger to ensure it is in good condition and not torn.

Examining the seal ring on the plunger

Examining the plunger seating surface

7. If any of these conditions are present, replace the old plunger with the new one from your kit. Verify that the new plunger is also free from defects. If it is not, contact your Ecolab representative immediately.

8. The plunger should drop into the vacuum breaker and seat. Ensure it is not flipped upside down (the orange seal ring should be up towards the top of the vacuum breaker).

9. Pick up the cap and examine it. With a soft towel, remove any grit, grime or debris that may have gotten caught in the threads of both the cap retainer or the vacuum breaker body. There is an O-ring that should be present on the cap retainer as well. Regardless of the condition of the plunger, this O-ring should be replaced once the cap is removed. Using a small flathead screwdriver, remove the old O-ring.

Replacing the O-ring

10. With the new O-ring in place, screw the cap back on the vacuum breaker body. The cap needs to only be hand tight (snug).

AFTER MAINTENANCE ACTIONS

1. Reconnect the incoming water (if disconnected) and turn on. Then restore power to the unit. Run the unit for at least 10 minutes to ensure there are no leaks. If any problems arise please contact your Ecolab representative.

SPECIAL PARTS

Vacuum breaker repair kit:
For 1/2” NPT order 06401-003-06-23

Complete Vacuum Breaker Assembly
Part number 04820-003-06-13 (1/2”)

The drive motor and the gear reducer of your Jackson rack conveyor are responsible for moving racks of ware through the dishmachine. If needed to be replaced, these instructions will show you how to get your machine up and running in the shortest possible time.

Jackson offers all of the repair parts necessary for performing this task.

The instructions provided here are for maintenance personnel only. Unauthorized persons should not attempt any of the steps contained in these instructions.

Warning: many of the instructions and steps within this document require the use of tools. Only authorized personnel should ever perform any maintenance procedure on the dishmachine!

PREPARATION

1. Power must be turned off to the unit at the service breaker. Tag or lock out the service breaker to prevent accidental or unauthorized energizing of the machine.

TOOLS REQUIRED

The following tools will be needed to perform this maintenance evolution:

1. 7/16” socket and ratchet with extension
2. 9/16” socket and ratchet with extension
3. 7/16” combination wrench
4. 9/16” combination wrench
5. 3/4” combination wrench
6. 1/8” Allen wrench
7. 1/4” nutdriver
8. Large flathead screwdriver
9. Medium phillipshead screwdriver
10. Medium hammer
11. Rubber mallet

TIME REQUIRED

It is estimated that it will take (1) person one and a quarter hours to replace the drive motor, one and a quarter hours to just replace the gear reducer or two hours to do both at one time, not including all of the items indicated in the section entitled “PREPARATION”.

IMPORTANT NOTES

1. Read these instructions thoroughly before attempting this maintenance procedure. Become familiar with the parts and what actions need to be taken. This will save time in the long run!

2. The procedures demonstrated in this manual are shown being performed on an AJ-44 rack conveyor dishmachine. The actual maintenance steps, however, apply to any drive motor or gear reducer found on a Jackson rack conveyor dishmachine.

STEPS

1. Remove the (2) screws that secure the top drive assembly cover in place.

Removing the screws from the top cover.

2. Remove the top cover to expose the drive assembly.

Removing the top cover.

3. Set the top cover to the side and out of the way so that it does not become a trip hazard. From here, the next step will be to remove the bottom cover. This will require using the 7/16” socket with ratchet and most likely the 7/16” combination wrench. Do not lose the hardware for the covers as your repair kits do not come with the hardware necessary to replace these. If you do require hardware that is not present in your kits, do not hesitate to contact Jackson Technical Service for help.

Removing the nuts securing the bottom cover.

Removing the bottom cover.

4. Remove the bottom and set to the side so that it does not become a trip hazard.

Removing the bolts holding the drive motor to the gear reducer.

5. With the cover removed you may now remove the bolts used to connect the drive motor to the gear reducer. **Note:** you need to support the motor as you remove the bolts; failure to do so could result in the motor falling to the ground and becoming damaged.

Removing the drive motor.

6. Once the bolts are removed, the motor should slide out of the gear reducer. Remember to support and lay it gently on the floor or some other surface in order to continue working on it. Be sure that you get the key, checking the keyway on the motor shaft and in the gear reducer.

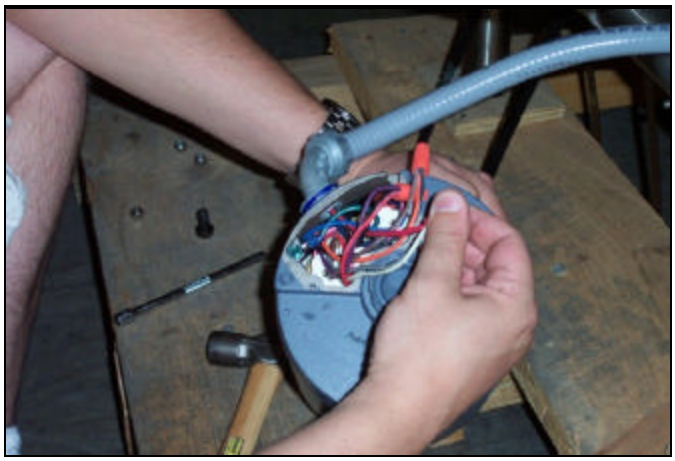
Removing the wiring access cover.

7. If the purpose of this maintenance action is to replace the drive motor, continue to step 8. If you wish to replace the gear reducer, continue to step 21.

8. With the motor laying on a level surface, you need to remove the conduit from it. First, use the 1/4” nutdriver to remove the wiring access cover on the back of the motor.

9. Once the cover is removed and the wiring is exposed, you

may want to jot down how your motor is wired. You can also refer to the schematic located on the motor itself because how the motor is wired when you remove it is how you will wire it when you replace it. If you have any questions regarding the wiring of your motor, do not hesitate to contact Jackson Technical Service.



Removing the wire nuts.

10. pull the bundled wires out and remove the wire nuts. Set the wire nuts to the side as you will need them when you wire up the new motor.

11. Once the wire nuts are removed, separate the wires.

12. With the flathead screwdriver and the hammer, loosen the conduit nut. Once loosened, pull the conduit away from the motor. The motor may now be disposed of.

13. Remove the access cover off of the new motor.

14. Attach the conduit and pull the wires through the hole provided. Tighten the conduit nut.

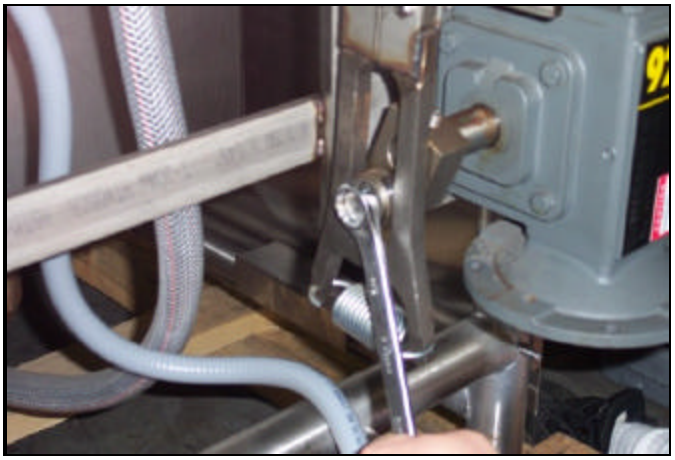
15. Using the wire nuts, wire the motor back the same way the old one had been. Refer to the schematic on the motor itself or contact Jackson Technical Service if you any questions.

16. Once the wiring is done, carefully push wires back into the motor and put the access cover back on. Tighten down the screws for securing it.

17. The drive motor now needs to be reattached to the gear reducer. There are two methods for doing this. The first is to try and and reinsert the drive motor shaft into the gear reducer with it (gear reducer) still attached to the unit. This is difficult but possible. Ensure that the key is in the keyway when you mate the parts. The second method and perhaps the easiest is to remove the gear reducer, mate the two parts and bolt them together and then put them on the unit at one time. This method takes a little more time. If you wish to remove the gear reducer and assemble the two components continue on to step 27.

The WRONG way to mount the drive motor.

The Correct way to mount the drive motor.



Removing the drive hub bolt.

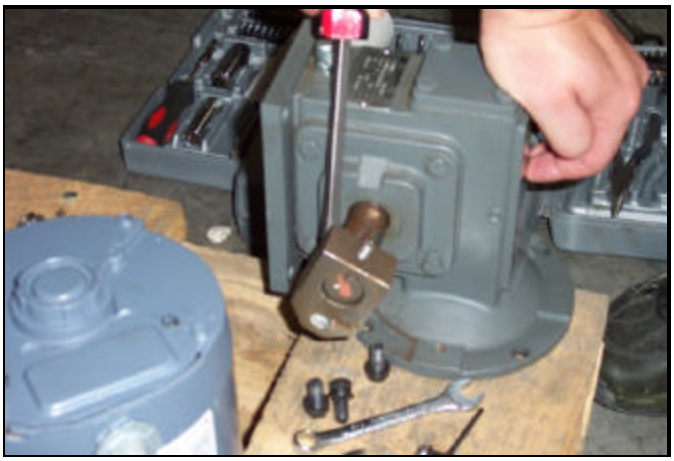
18. Once the motor and gear reducer are mated, secure them with the locknuts and bolts. Ensure the bolts are tight.

Loosening the set screw with the 1/8 allen wrench.

Removing the nuts holding the gear reducer on.

Removing the gear reducer.

Note: Because of the way the covers for the drive assembly are designed, it is imperative that you position the motor on the gear reducer so that the conduit fitting is facing towards the front of the dishmachine. If it is facing away from the machine, the covers may not go back on.



Removing the drive hub.

19. Reattach the bottom and top drive assembly covers.

20. Proceed to the sections entitled “AFTER MAINTENANCE ACTIONS”.

21. (Continuing from step 7) To remove the gear reducer, first take the 3/4” combination wrench and remove the drive hub bolt.

22. Once the drive hub bolt & bearing are removed, loosen the set screw on the drive hub. There is no need to remove it.

23. Remove the gear drive by using the 9/16” socket and ratchet, as well as the combination wrench as required, to remove the nuts holding it to the mounting plate.

24. Gently remove the gear reducer, careful not to drop it.

25. Set the gear reducer on a flat surface. The drive hub needs tobe removed. You have already loosened the set screw, but it may take some more effort to remove it. You may have pry it off, or give it some taps with a mallet to coax it off of the shaft. The liberal use of spray lubricants will also help.

26. Once the drive hub is removed, place it on the shaft of the new gear reducer. Ensure the key is in the keyway. Once it is on and flush with the end of the shaft, tighten down on the set screw with the 1/8” allen wrench.

27. As you have both the drive motor and the gear reducer off of the machine, it is much simpler to assemble them together prior to mounting them. Ensuring that the key for the drive shaft of the drive motor is in the keyway.

28. After the motor is mated against the gear reducer, turn the motor so that the conduit fitting will face towards the front of the dishmachine once both components are mounted to the frame. This is to all the drive assembly covers to go back on. If you do not do this, then there is a possibility the covers will not fit back on the unit. Refer to step 18 and the note following for more details.

29. Stand the assembly up and secure them using the lockwashers and bolts. Use the 9/16" combination wrench to tighten them down.

Mounting the motor to the gear reducer.

Tightening the bolts to secure the drive motor to the gear reducer.

30. Once the motor is securely fastened to the gear reducer, carefully lift the assembly up and mount it on the fasteners. Be sure to use proper lifting techniques to prevent injury.

31. Once mounted, secure with the lockwashers and locknuts.

32. Reinstall the drive hub bearing and drive hub bolt, tightening down with the 7/8" combination wrench.

33. Reattach the bottom and top assembly covers.

AFTER MAINTENANCE ACTIONS

Reconnect the incoming water (if disconnected) and turn on. Then restore power to the unit. Run the unit for at least 10 minutes, running an empty rack through the machine to ensure that it is carried all of the way through. If you hear any grinding sounds while the motor is running, immediately shut off the unit and secure power and water. There is a serious problem that must be addressed. If any problems arise you can contact Jackson Technical Service.

SPECIAL NOTES

Work performed on Jackson dishmachines by unauthorized or unqualified personnel may void the warranty. Before beginning this or any other maintenance evolution on a unit under warranty, you should contact a certified Jackson technician or Jackson Technical Service. You can find a list of qualified service agencies in the back of you unit's installation manual.

SPECIAL PARTS

AJ-44/66/80 Machines:
Gear Reducer: 06105-011-71-88
Drive Motor Replacement Kit:
50 Hz: 06401-003-08-41
60Hz/1 Ph: 06401-003-08-42
60 Hz/3 Ph: 06401-003-08-40
600V/60 Hz/3 Ph: 06401-003-08-43

CONTACT INFORMATION

Jackson MSC Inc. provides technical support for all of the dishmachines detailed in this manual. We strongly recommend that you refer to this manual before making a call to our technical support staff. Please have this manual with you when you call so that our staff can refer you, if necessary, to the proper page. Technical support is available from 8:00 a.m. to 5:00 p.m. (EST), Monday through Friday. Technical support is not available on holidays. Contact technical support toll free at 1-888-800-5672.

REPLACING THE WASH HEATER

Jackson rack conveyor machines come equipped with heaters to ensure proper ware washing results. Occasionally, some of these components may need replacing to maintain optimum performance.

Jackson offers all of the repair parts necessary for performing this task.

The instructions provided here are for maintenance personnel only. Unauthorized persons should not attempt any of the steps contained in these instructions.

Warning: many of the instructions and steps within this document require the use of tools. Only authorized personnel should ever perform any maintenance procedure on the dishmachine!

PREPARATION

1. Power must be secured to the unit at the service breaker. Tag or lock out the service breaker to prevent accidental or unauthorized energizing of the machine.

2. Ensure that incoming water to the machine is secured either by use of a shut-off valve or disconnecting the incoming water line.

3. The unit must be drained completely.

TOOLS REQUIRED

The following tools will be needed to perform this maintenance evolution:

1. 3/8” Nutdriver
2. Ratchet
3. 1/2” Socket
4. 3/8” Socket
5. Phillipshead Screwdriver
6. Needlenose Pliers
7. Torque Wrench
8. Siliconee Sealant
9. Amp Meter

TIME REQUIRED

It is estimated that it will take (1) person ninety minutes to perform this task, not including all of the items indicated in the section entitled “PREPARATION”.

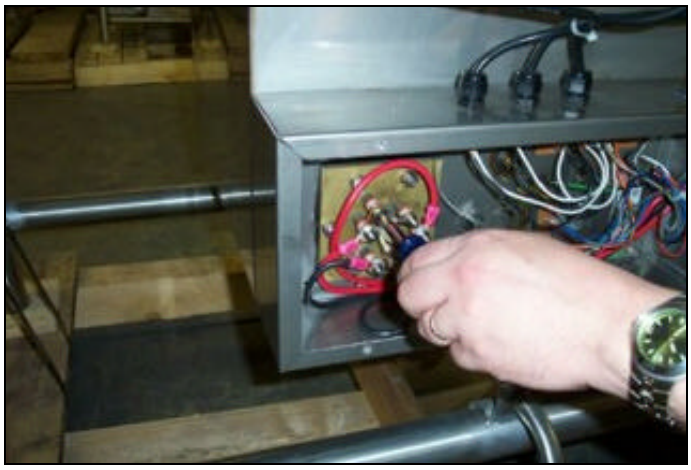
IMPORTANT NOTES

1. Read these instructions thoroughly before attempting this maintenance task. Become familiar with the parts and what actions need to be taken. This will save time in the long run!

STEPS

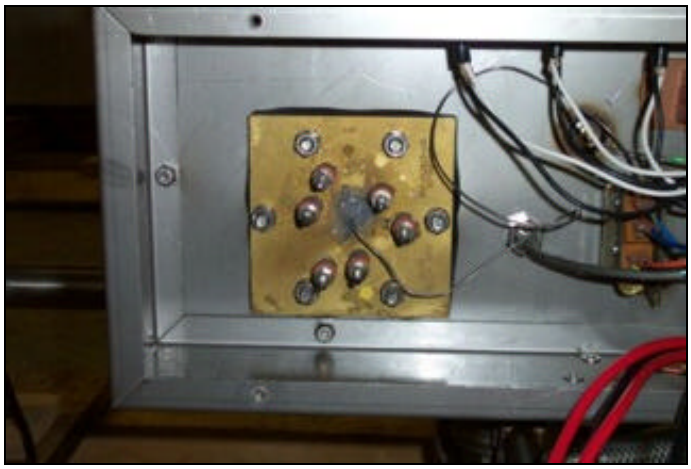
1. Remove the front dress panel.

2. Remove the heater box cover to expose the heater. Set the cover and hardware to the side.



Removing the power lines.

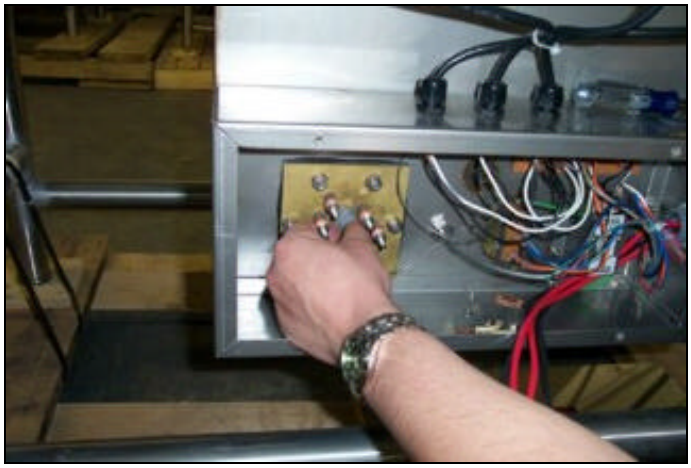
3. Remove the incoming electrical lines from the heater. Set the hardware to the side.



Heater without power lines attached.

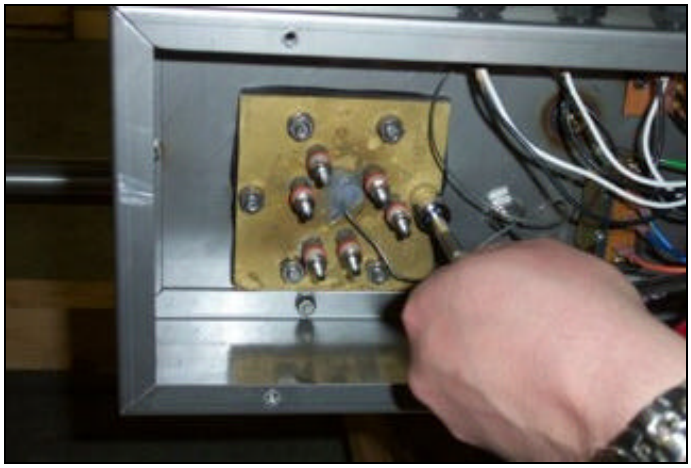
4. Push the incoming electrical lines out of the way.

5. The thermostat probe needs to be removed from the well inside the heater. The probe is secured in place with silicone that must be peeled away prior to attempting to remove it. It is important that you do not damage the probe during this part of the maintenance action. If you do, then the thermostat will have to be replaced as well.



Removing silicone from thermostat well

6. Using your hand or needlenose pliers, remove the silicone so that the thermostat probe may be gently removed.



Removing the nuts and lockwashers

Removing the heater

Removing the gasket

7. With the thermostat probe out of the way, use the 1/2” socket and ratchet to remove the nuts holding the heater to the tub. Remove all nuts and lockwashers.

8. Remove the heater from the tub weldment.

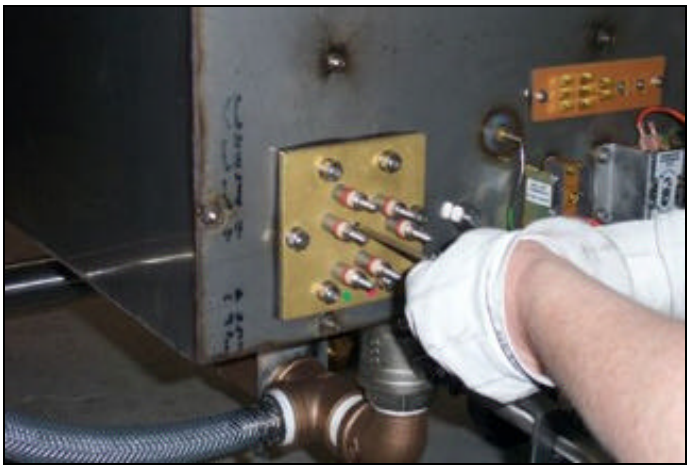
9. Remove the gasket.

Applying the torque wrench to the nuts

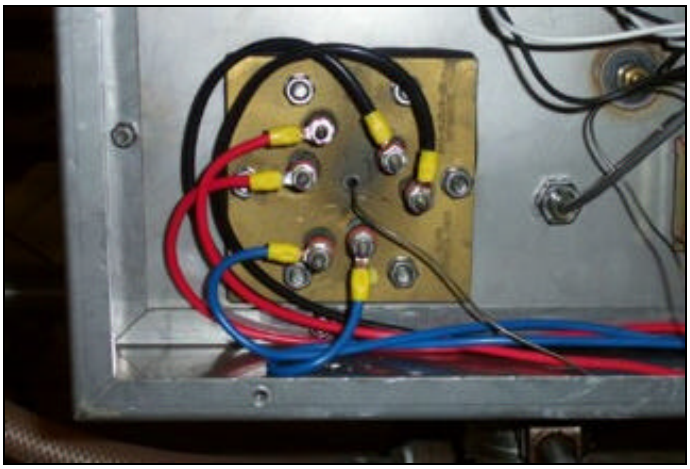
10. Before proceeding any further, it is important to verify that the tub wall is free of any excess debris so that when the new gasket is applied, there are no gaps that could lead to leaking around the heater.

11. Apply the new heater gasket from your service kit.

12. Slide the heater onto the studs and apply by hand the lockwashers and nuts. Tighten the nuts by hand and then use the torque wrench set to 154 in-lbs to ensure that the nuts are secure.



Putting the thermostat probe in the heater well



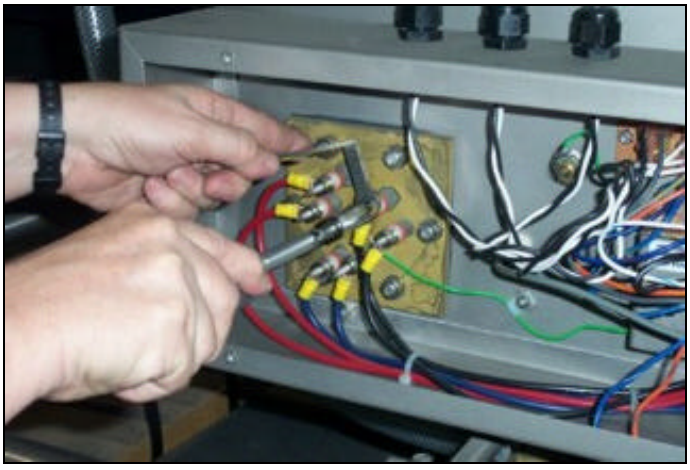
Three phase wiring

Applying silicone to the heater well

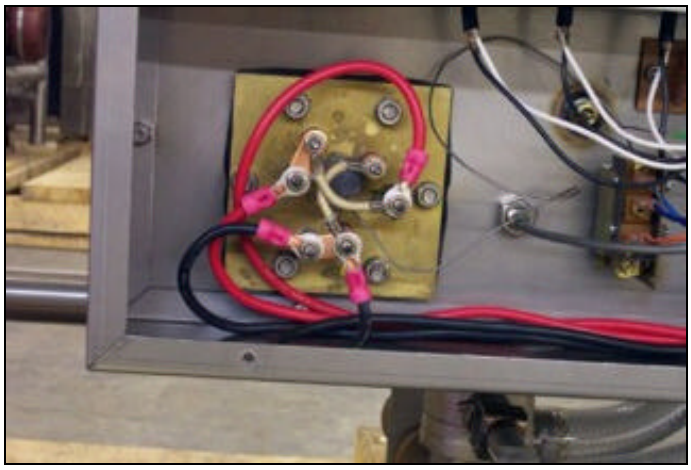
13. The thermostat probe needs to be placed into the well of the new heater. Again, use caution when doing this so that the probe or the capillary tube do not become broken. If this occurs, then the thermostat will have to be replaced.

14. Apply silicone to seal the well and hold the thermostat probe in place.

15. Reattach the incoming power lines to the heater, ensuring that you wire the heater correctly for either single or three phase operation.



Tightening the nuts holding the power lines



Single phase wiring

16. Using the torque wrench or a torque nutdriver (if available) torge the nuts holding the wires, jumpers and bus bars to 16 in-lbs.

17. Ensuring that all non-essential personnel are clear of the area, close the drain valve(s) and restore power and water to

the unit. Turn the unit on and allow it to fill normally.

18. Verify that there are no leaks around the heater. If there are, attempt to tighten it down as the tub will change shape slightly as it heats up.

19. Use the amp meter to take readings off of the power lines to the heater, verifying the amperage draw to the machine data plate.

20. Wait until the heater contactor kicks out (meaning that the tub has reached the appropriate temperature) and place the unit in DELIME mode by flipping the switch on the back of the control box. Allow the unit to operate for at least ten minutes to verify that there are no leaks and that the heater is maintaining the tank temperature.

21. If the unit appears to be operating correctly, return it to AUTO mode and turn off.

22. Replace the heater box cover.

23. Replace the front dress panel.

AFTER MAINTENANCE ACTIONS

Service perosnnel may want to drain the machine and allow it to cool down. Secure power to the unit at the service breaker and then verify the torque of all fasteners covered in this instruction.

SPECIAL NOTES

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SPECIAL PARTS

Heater Replacement Chart

Model	Volts	Phase	KW	Part Number
All*	208	1	18	04540-121-79-30
	230	1	18	04540-121-79-31
	200	3	18	04540-121-79-30
	208	3	18	04540-121-79-30
	220	3	18	04540-121-79-31
	230	3	18	04540-121-79-31
	380	3	18	04540-003-08-51
	415	3	18	04540-003-08-52
	440	3	18	04540-003-08-53
	460	3	18	04540-121-79-32
	575	3	18	04540-003-06-22
	600	3	18	04540-003-06-22

CONTACT INFORMATION

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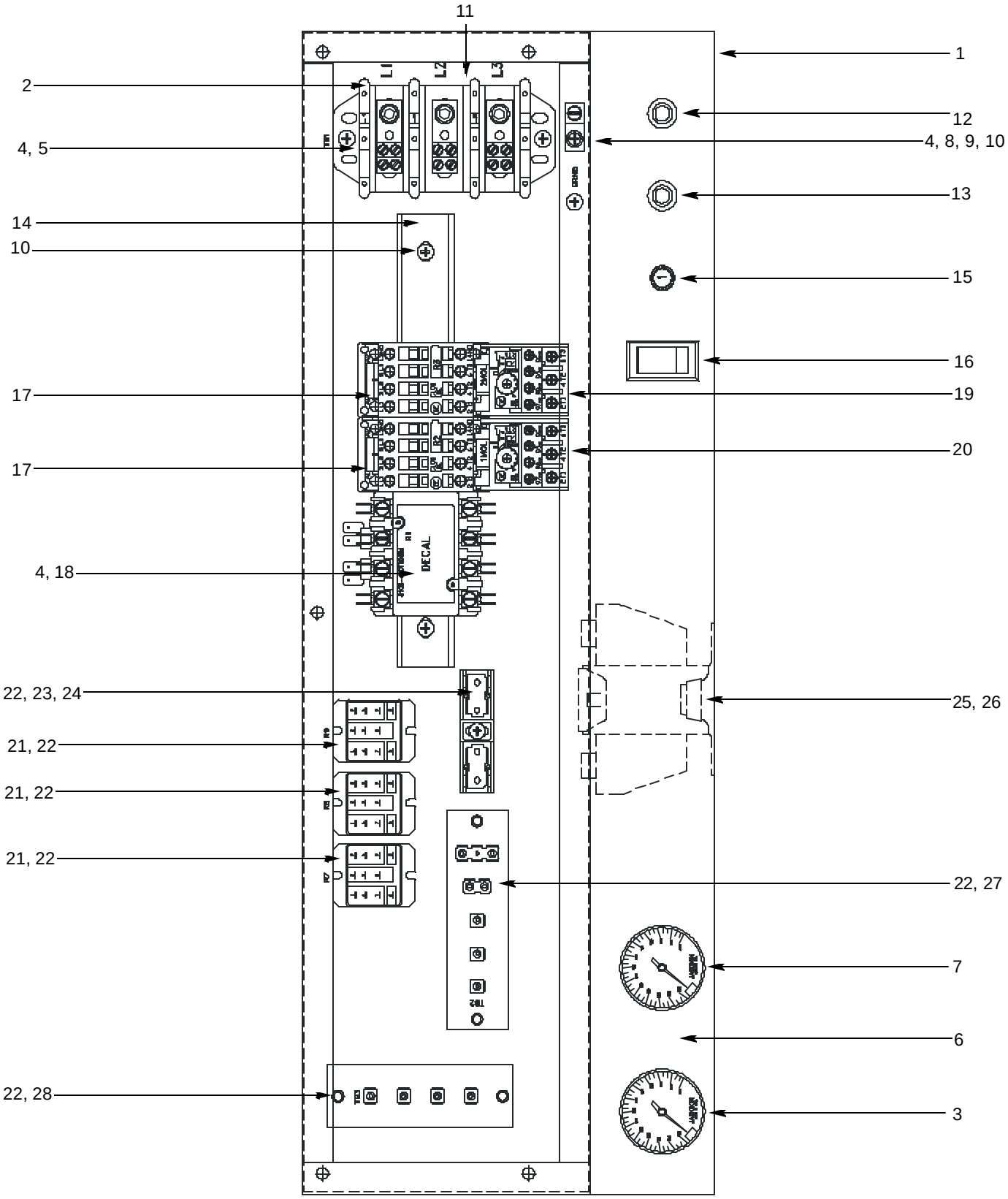
SECTION 6:
PARTS SECTION

SECTION 6: PARTS SECTION

AJ-44T CONTROL BOX ASSEMBLY



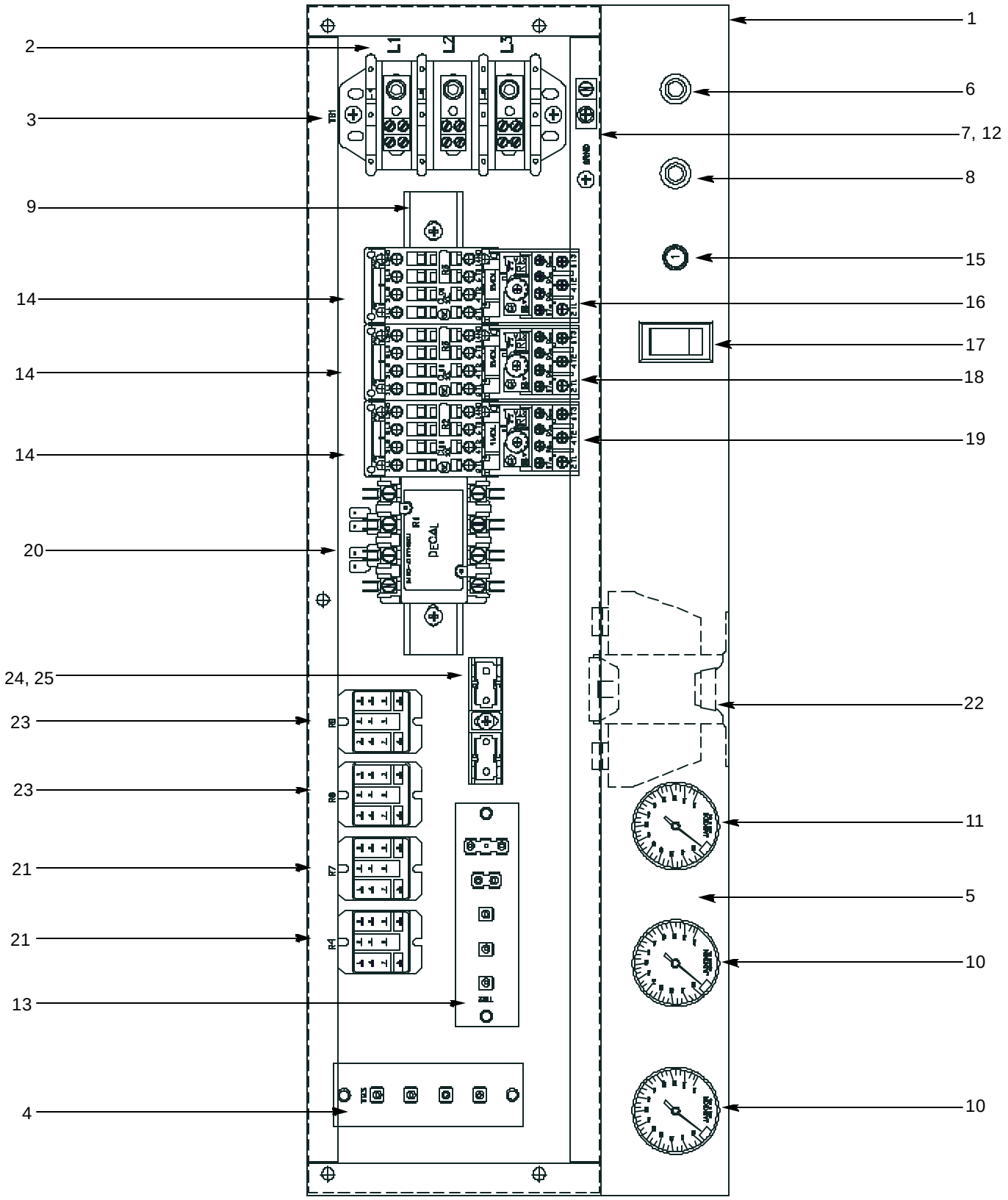
ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Electrical Box Weldment	05700-041-88-43
2	1	Terminal Block, 3 Pole	05940-011-48-27
3	1	Rinse Thermometer, 96” Lead	06685-111-68-49
	1	Rinse Decal, 180°F	09905-002-97-62
4	6	Star Washer, External Tooth, 10-24	05311-273-02-00
5	6	Screw, 10-32 x 3/4” Long Phillips Trusshead	05305-011-62-17
6	1	Decal, Gauge	09905-021-72-29
7	1	Wash, Thermometer, 48” Lead	06685-111-68-48
	1	Wash Decal, 160°F	09905-003-00-69
8	1	Wire Lug, 2 AWG to 14 AWG	05940-200-76-00
9	1	Decal, Ground	09905-011-86-86
10	2	Screw, 10-32 x 1/2” Long Phillips Trusshead	05305-011-39-36
11	1	Decal, L1-L2-L3	09905-101-12-66
12	1	Light, Amber	05945-111-44-44
13	1	Light, Red	05945-111-44-45
14	1	Din Rail	05700-021-72-75
15	1	Circuit Breaker (200-380 Volt, 60 Hz Models Only)	05925-011-68-34
15	1	Circuit Breaker (TG Models Only)	05925-111-64-18
16	1	Switch, ON/FILL - OFF/DRAIN	05930-301-46-00
17	2	Motor Contactor	05945-111-68-38
18	1	Heater Contactor	05700-002-24-70
19	1	Overload	See Page 48
20	1	Overload	See Page 48
21	1	Control Relay	05945-111-35-19
21	2	Control Relay	05945-111-72-51
22	10	Screw, 6-32 x 3/8” Long Round Phillipshead	05305-002-25-91
23	1	Fuse (380 Volt-460 Volt, (all 60 Hz) Models Only)	05920-011-72-88
	1	Fuse, 600 Volt Models Only	05920-002-75-95
24	1	Fuse Holder for (23) Above	05920-011-72-89
25	1	Transformer	
		200 Volt Model	05950-002-41-47
		208-220-230-460 Volt Models	05950-011-68-35
		208-220-230-460 Volt TG Models	05950-002-46-10
		380-415 Volt Models	05950-011-75-59
		600 Volt Model	05950-002-23-77
26	4	Locknut, 10-24 with Nylon Insert	05310-373-01-00
27	1	Terminal Board	05940-002-78-97
28	1	Terminal Board	05940-021-89-41
29	2	Control Relay (TG Models Only (Not Shown))	05945-111-72-51

MISCELLANEOUS PARTS NOT SHOWN:

Grommet, 1/2” OD x 3/8” ID	05325-011-46-73
Bushing, Heyco SB100	05975-210-09-00
Plug, Heyco 2700 G-875	05975-011-47-81
Control Box Cover	05700-031-66-88
Control Box Cover Hinge Weldment	05700-021-68-57
Cotter Pin	05315-011-68-56
MANUAL/DELIME Switch (located on rear of control box)	05930-301-22-18
MANUAL/DELIME Switch Decal (located on rear of control box)	09905-011-74-61
Copper Conductors Only Decal	09905-011-47-35
Decal, Operation	09905-002-82-33
Decal, High Limit Light Warning	09905-002-49-48
Control Box Leg	05700-011-71-47
Component Mounting Plate (located inside the control box)	05700-031-67-03
Conduit Bracket	05700-021-70-88

SECTION 6: PARTS SECTION

AJ-66T & AJ-80T CONTROL BOX ASSEMBLY



ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Electrical Box Weldment	05700-041-88-50
2	1	Decal, L1-L2-L3	09905-101-12-66
3	1	Terminal Block	05940-011-48-27
4	1	Terminal Board	05940-021-89-41
5	1	Decal, Gauge	09905-021-72-30
6	1	Light, Amber	05945-111-44-44
7	1	Wire Lug, 2 AWG to 14 AWG	05940-200-76-00
8	1	Light, Red	05945-111-44-45
9	1	Din Rail	05700-021-72-75
10	2	Thermometer, 96” Lead	06685-111-68-49
		Rinse Decal, 180ºF	09905-002-97-62
11	1	Thermometer, 48” Lead	06685-111-68-48
	1	Wash Decal, 160°F	09905-003-00-69
12	1	Decal, Ground	09905-011-86-86
13	1	Terminal Board	05940-002-78-97
14	3	Motor Contactor	05945-111-68-38
15	1	Circuit Breaker (200/208/230/360 Volt, 60 Hz Models Only)	05925-011-68-34
15	1	Circuit Breaker (TG Models Only)	05925-111-64-18
16	1	Overload	See Page 48
17	1	Switch, ON/FILL & OFF/DRAIN	05930-301-46-00
18	1	Overload	See Page 48
19	1	Overload	See Page 48
20	1	Heater Contactor (for non-steam units)	05945-002-24-70
21	2	Relay	05945-111-72-51
22	1	Transformer (200 Volt Models Only)	05950-002-41-47
		Transformer (208/220/230/460 Models Only)	05950-011-68-35
		Transformer (208-220-230-460 Volt TG Models)	05950-002-46-10
		Transformer (380/415 Volt Models Only)	05950-011-75-59
		Transformer (600 Volt Models Only)	05950-002-23-77
23	2	Control Relay	05945-111-35-19
24	1	Fuse Holder (380 (60 Hz)/460/600 Volt Models Only)	05920-011-72-89
25	1	Fuse (380 (50 Hz)/460 Volt Models Only)	05920-011-72-88
	1	Fuse (600 Volt Models Only)	05920-002-75-95
26	2	Control Relay (TG Models Only (Not Shown))	05945-111-72-51

MISCELLANEOUS PARTS NOT SHOWN:

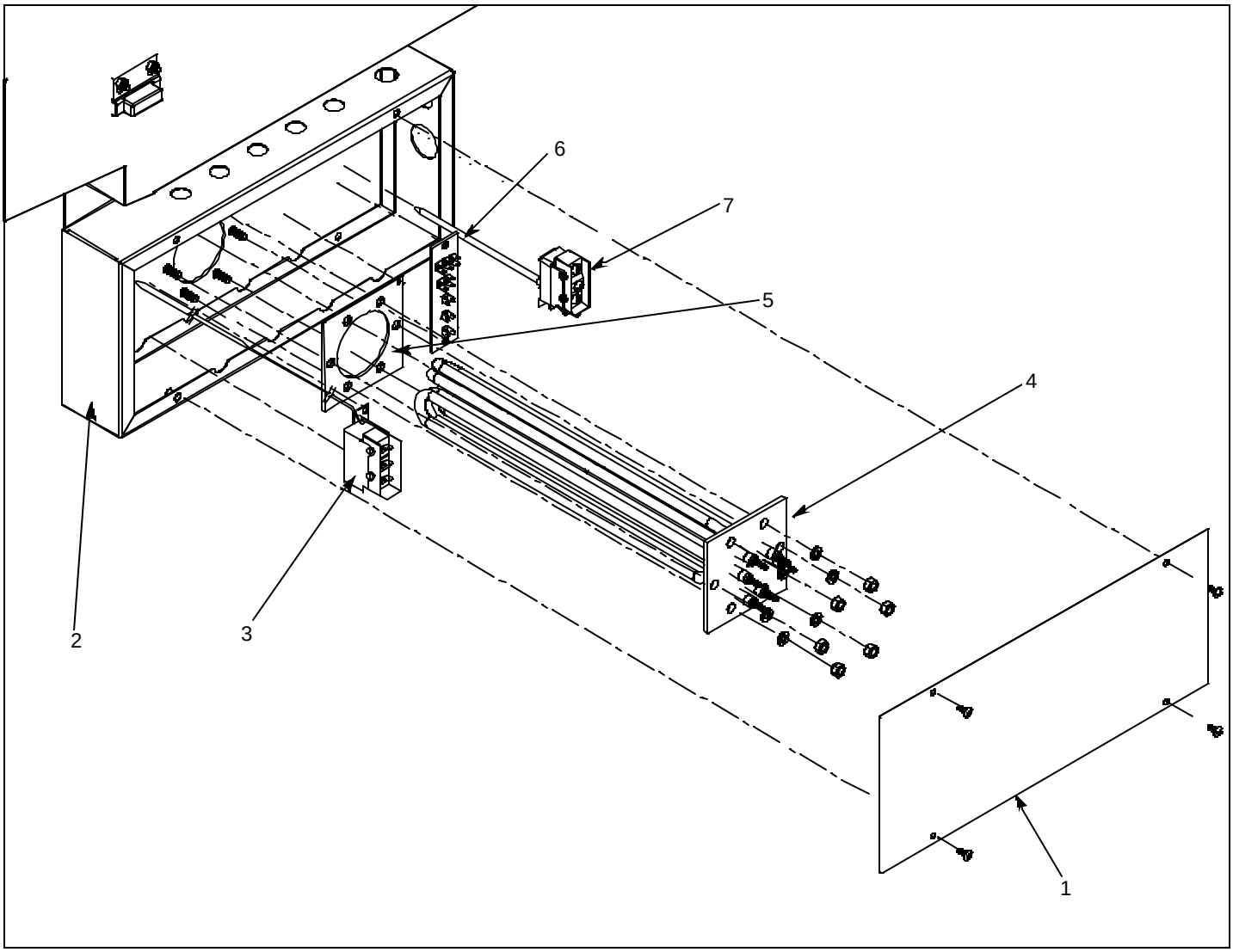
Manual/Delime Switch	05930-301-22-18
Manual/Delime Switch Decal	09905-011-74-61
Decal, Operation	09905-002-82-33
Decal, High Limit Warning Light	09905-002-49-48
Control Box Cover	05700-031-66-88
Control Box Leg	05700-011-71-47
Conduit Bracket	05700-021-70-88

SECTION 6: PARTS SECTION

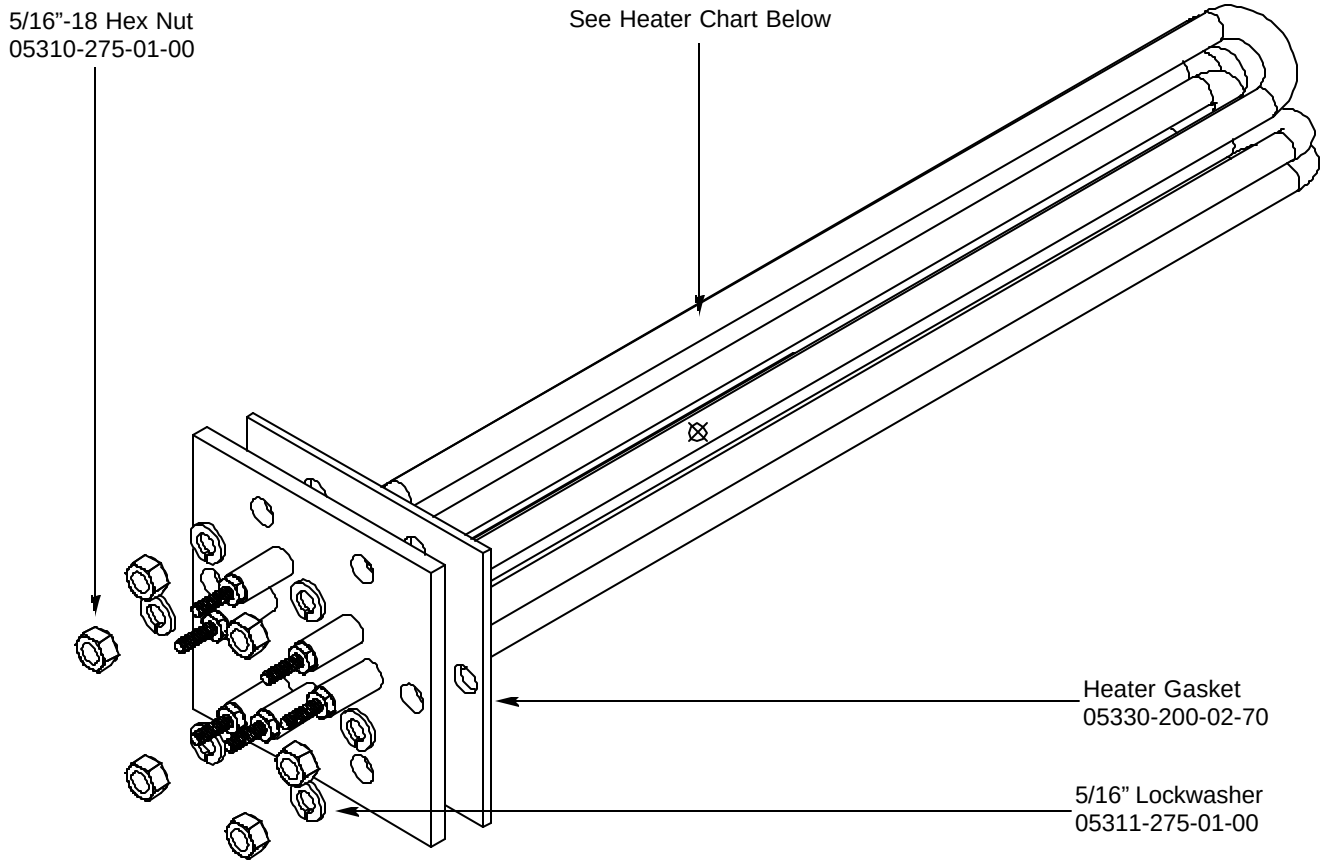
MOTOR OVERLOAD CHART

Model	Volts	Hz	Phase	Drive Motor	Prewash Motor	Wash Motor
AJ-44T'S	208	50	3	05945-011-84-59	N/A	05945-111-68-40
	220	50	3	05945-011-84-59	N/A	05945-111-68-40
	230	50	3	05945-011-84-59	N/A	05945-111-68-40
	380	50	3	05945-002-71-09	N/A	05945-111-68-40
	415	50	3	05945-111-69-12	N/A	05945-111-81-33
	440	50	3	05945-111-69-12	N/A	05945-111-81-33
	208	60	1	N/A	N/A	N/A
	230	60	1	N/A	N/A	N/A
	200	60	3	05945-002-66-00	N/A	05945-002-65-99
	208	60	3	05945-111-68-39	N/A	05945-111-68-40
	230	60	3	05945-111-68-39	N/A	05945-111-68-40
	380	60	3	05945-111-69-12	N/A	05945-111-81-33
	460	60	3	05945-111-68-39	N/A	05945-111-68-40
	600	60	3	05945-111-69-12	N/A	05945-111-81-33
AJ-66T'S	200	50	3	05945-011-84-59	05945-002-65-98	05945-111-68-40
	208	50	3	05945-011-84-59	05945-002-24-70	05945-111-68-40
	220	50	3	05945-011-84-59	05945-002-24-70	05945-111-68-40
	230	50	3	05945-011-84-59	05945-002-24-70	05945-111-68-40
	380	50	3	05945-002-71-09	05945-002-24-70	05945-111-68-40
	415	50	3	05945-111-69-12	05945-002-24-70	05945-111-81-33
	440	50	3	05945-111-69-12	05945-002-24-70	05945-111-81-33
	208	60	1	N/A	N/A	N/A
	230	60	1	N/A	N/A	N/A
	200	60	3	05945-002-66-00	05945-002-66-02	05945-002-65-99
	208	60	3	05945-111-68-39	05945-111-68-41	05945-111-68-40
	230	60	3	05945-111-68-39	05945-111-68-41	05945-111-68-40
	380	60	3	05945-111-69-12	05945-002-24-70	05945-111-81-33
	460	60	3	05945-111-68-39	05945-111-68-41	05945-111-68-40
	600	60	3	05945-111-69-12	05945-111-81-33	05945-111-81-33
AJ-80T'S	200	50	3	05945-011-84-59	05945-111-68-40	05945-111-68-40
	208	50	3	05945-011-84-59	05945-111-68-40	05945-111-68-40
	220	50	3	05945-011-84-59	05945-111-68-40	05945-111-68-40
	230	50	3	05945-011-84-59	05945-111-68-40	05945-111-68-40
	380	50	3	05945-002-71-09	05945-111-68-40	05945-111-68-40
	415	50	3	05945-111-69-12	05945-111-81-33	05945-111-81-33
	440	50	3	05945-111-69-12	05945-111-81-33	05945-111-81-33
	208	60	1	N/A	N/A	N/A
	230	60	1	N/A	N/A	N/A
	200	60	3	05945-002-66-00	05945-002-65-99	05945-002-65-99
	208	60	3	05945-111-68-39	05945-111-68-40	05945-111-68-40
	230	60	3	05945-111-68-39	05945-111-68-40	05945-111-68-40
	380	60	3	05945-111-69-12	05945-111-81-33	05945-111-81-33
	460	60	3	05945-111-68-39	05945-111-68-40	05945-111-68-40
	600	60	3	05945-111-69-12	05945-111-81-33	05945-111-81-33

HEATER BOX ASSEMBLY



ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Heater Box Cover	05700-002-02-04
2	1	Heater Box Weldment	05700-002-98-38
3	1	Thermostat, High Limit	05930-011-49-43
	1	Fitting, 1/4", Imperial Brass	05310-924-02-05
4	1	See Next Page	N/A
5	1	Gasket	05330-200-02-70
6	1	Terminal Board	05940-002-78-97
7	1	Kit, Wash Regulating Thermostat (TE Series)	06401-003-18-20
7	1	Kit, Wash Regulating Thermostat (TS Series)	06401-003-18-21



Heater Chart

Model	Volts	Phase	KW	Part Number
All*	208	1	18	04540-121-79-30
	230	1	18	04540-121-79-31
	200	3	18	04540-121-79-30
	208	3	18	04540-121-79-30
	220	3	18	04540-121-79-31
	230	3	18	04540-121-79-31
	380	3	18	04540-003-08-51
	415	3	18	04540-003-08-52
	440	3	18	04540-003-08-53
	460	3	18	04540-121-79-32
	575	3	18	04540-003-06-22
	600	3	18	04540-003-06-22

* - Gas and steam models do not use electric heaters in the wash tank or power rinse tank.

SERVICE NOTE: When replacing the tub heaters, it is HIGHLY recommended that you also change out the gasket as well. Once installed, gaskets become compressed and are subjected to extreme temperature changes. Replacing the gasket with a new one when replacing the heater may prevent future leaks.

SERVICE NOTE: The nuts used to secure the heater to the tub should be torqued to 16 in-lbs. After tightening, the unit should be allowed to heat up and operate normally for approximately 30 minutes. Secure power to the machine and check the nuts once more to ensure that they are torqued to 16 in-lbs.

The wash tank heater system is electrically connected in the circuit so that they are dependent upon the dishwasher being properly filled with and maintaining a safe water level, two thermostats (mounted in the heater box behind the dress panel), float switch (mounted in the wash tank), and the heater relay (mounted in control box) with the heater being activated by the thermostats.

Once the dishwasher has been filled to the correct level, the heater should operate automatically. Should the tank heat be too high, too low or no indication of temperatures at all, the following checkout should be made.

Note: The following checkout should be made by either a qualified service person or electrician.

A- Checkout of the heater system

1- If the temperature is too high, adjust thermostat using instructions in the section entitled “Thermostats”.
2- If temperature is too low, adjust thermostat as above, then:
a - Turn off power to machine by placing customer’s circuit breaker in the “OFF” position. Turn off machine circuit breaker located on right side of control box.
b - Remove cover from control box on top of dishwasher.
c - Make sure water temperature is below 140°F.(preferably about 130°F.).
d - Turn on both circuit breakers. Observe heater relay (R1) while the power switch is turned “ON” and “OFF”. If relay contacts move in and out, the heater relay is operating correctly: if not proceed to “C”.

B- If heater relay (R1) closes:

1 - Check power supply at incoming terminal board L1, L2 & L3. It should be the same voltage as indicated on the machine data plate.
2 - Check power at connections on heater relay (R1). The voltage should agree with the voltage on the machine data plate. If not, check wires for breaks or bad connections.
3 - Check power at terminals of heater which should agree with the data plate. If not check wires for breaks or bad connections.
4 - Temperatures should rise as explained in “C-1”, and amperage may be checked according to those instructions. Replace any defective elements.

C - If heater relay (R1) does not close.

1 - There is an insulated movable insulated movable bar on relay across the top. With an insulated probe, depress this bar and observe the thermometer: the temperature should rise noticeably in a minute or two. If it moves slowly, it would indicate that the element is faulty. If it moves constantly higher at a good rate, elements should be good.

Note: A check with an amp probe at heater relay (R1) terminals should be made to verify the amp draw on each leg. This should be appropriate for the voltage and phase indicated on the data plate.

HEATER PROTECTION & AUTOMATIC FILL (FOR UNITS EQUIPPED WITH AUTOMATIC FILL)

This control is activated when the power switch is turned “ON”. The primary function is to automatically energize the wash tank heat circuit. It will also cutoff the wash tank heat circuit should the water be accidently drained from the machine with the power switch still “ON”. The power switch should always be turned-off before draining the unit.

This water level control consists of two (2) floats that operate when the power switch is turned on and works in conjunction with the thermostats and heater relays.

When the power switch is turned “ON” water starts to enter the dishmachine. When it reaches the proper level the normally open contacts in the water level float switch close activating the heating circuit for tank heat.

If the water level below the correct level while power is still on, the float switch will sense the lack of water and de-activate the heater.

THERMOSTATS

The thermostat range is from 140ºF to 240°F with a maximum bulb exposure temperature of 300ºF.

Calibration:

Wash Thermostat: Set Point: 165°F (Adjustable range)
Hi-LImit Thermostat: Fixed set point: 210°F (Non-adjustable)

The hi-limit thermostat is used to protect the heater element in the event of a run away regulating thermostat or a dry fire situation. It is set for 210°F +0ºF or -10ºF with a fixed set point. **This part is not adjustable.**

The wash tank regulating thermostat will maintain the correct wash water temperature to meet NSF requirements. These specify that the wash be no lower than 140ºF on chemical sanitizing models and no lower than 160°F on hot water sanitizing machines.

FRAME WELDMENTS

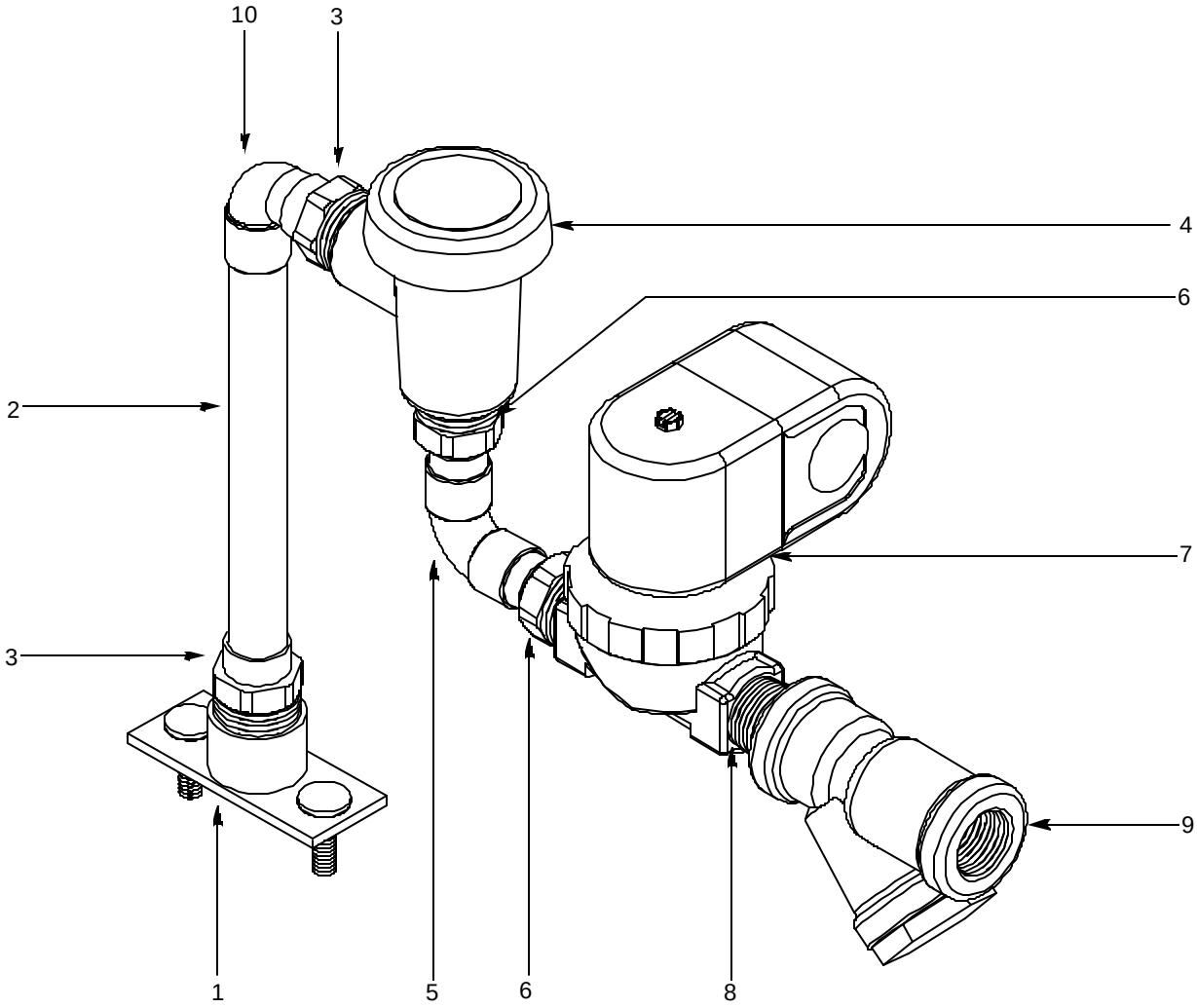
Model	Left to Right Part Number	Right to Left Part Number
AJ-44T's	05700-031-67-15	05700-031-67-15
AJ-66T's	05700-002-49-28	05700-002-57-57
AJ-80T's	05700-031-74-07	05700-002-32-14

Bullet Feet (4 per model) - order using part number 05340-011-71-74.

FRONT DRESS PANELS

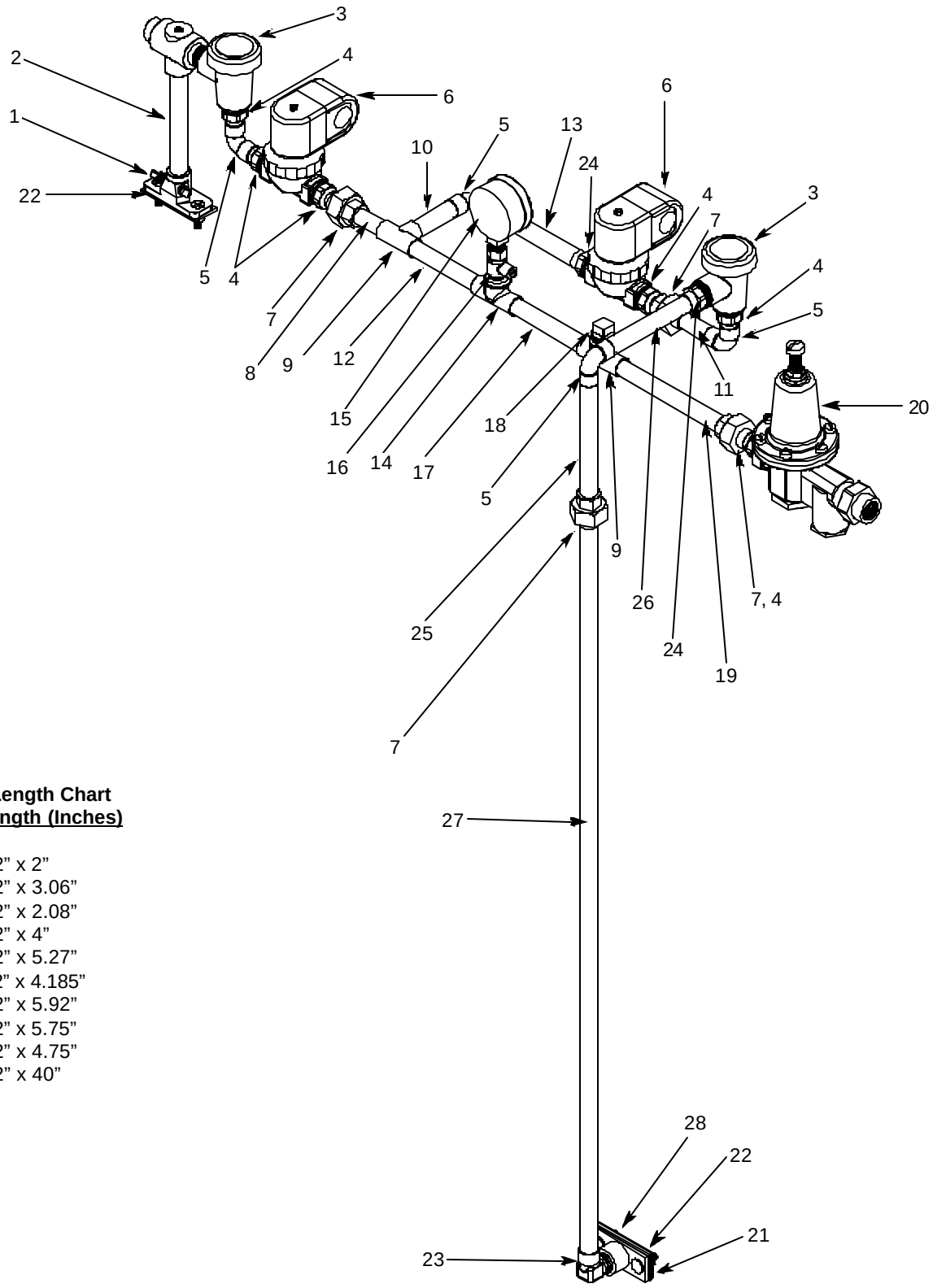
Model	Left to Right Part Number	Right to Left Part Number
AJ-44T's	05700-031-72-22	05700-031-72-22
AJ-44TG	05700-002-52-77	05700-002-52-77
AJ-66T's	05700-002-51-22	05700-002-57-84
AJ-66TG	05700-002-51-22	05700-002-57-84
AJ-80T's	05700-031-74-06	05700-031-77-10

PREWASH INCOMING PLUMBING ASSEMBLY



ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Fill Line Injector Weldment	05700-002-04-71
	1	Gasket	05330-111-42-81
2	1	Tube, Copper, 1/2” x 5.645” Long	05700-002-04-90
3	2	Adapter, Male	04730-401-03-01
4	1	Vacuum Breaker	04820-003-06-13
5	1	Elbow, 607, 1/2” CTOC	04730-406-01-01
6	2	Adapter, 1/2” FTG x Male	04730-011-59-53
7	1	Valve, Solenoid, 1/2” NPT, 110 Volt	04810-100-12-18
8	1	Nipple, 1/2”, Close, Brass	04730-207-15-00
9	1	Y-Strainer, 1/2” NPT	04730-217-01-10
10	1	Elbow, 1/2” S. CU to Ftg.	04730-406-31-01

INCOMING RINSE PLUMBING ASSEMBLY

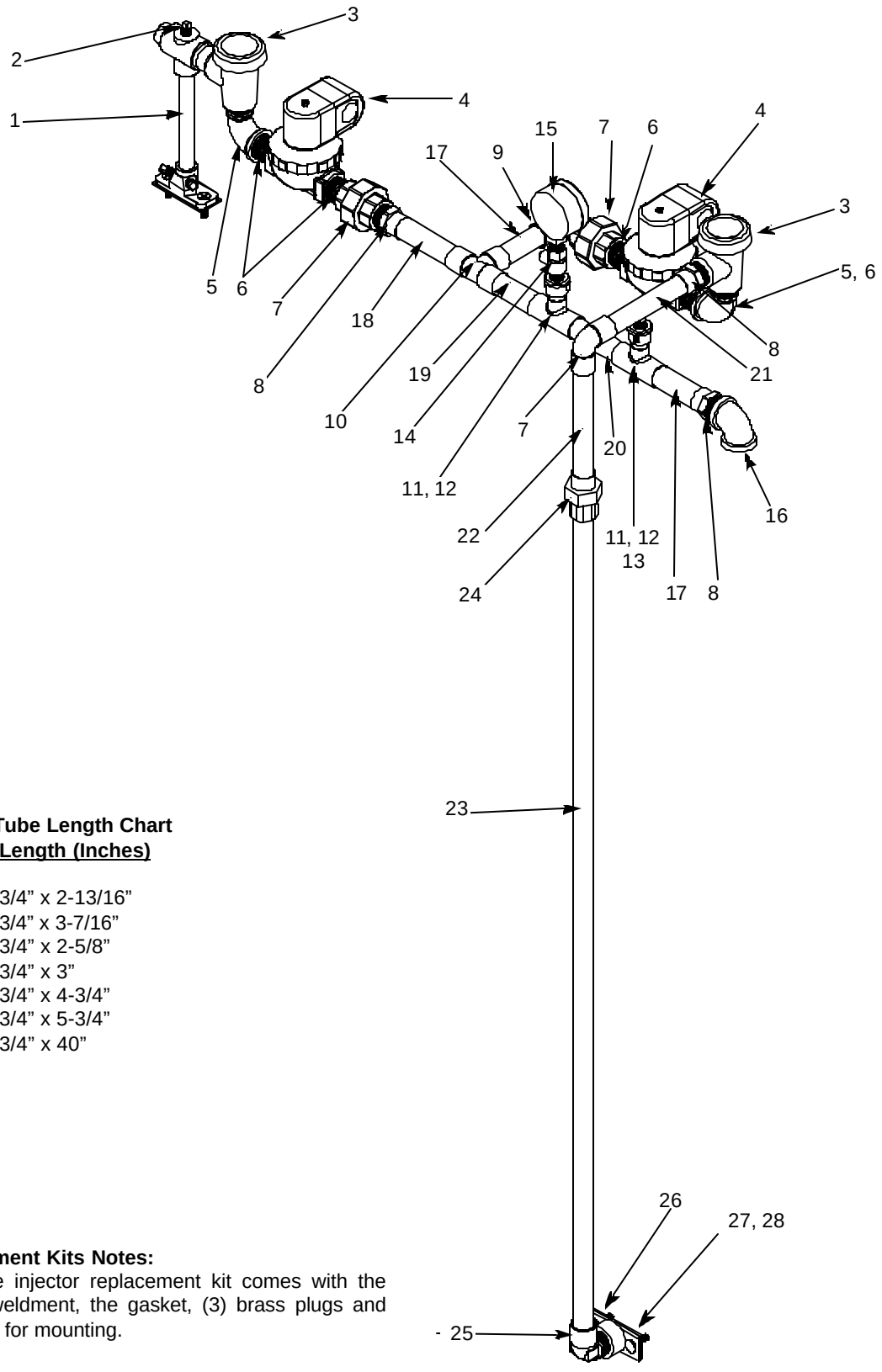


Tube Length Chart

Item #	Length (Inches)
8	1/2” x 2”
10	1/2” x 3.06”
11	1/2” x 2.08”
12	1/2” x 4”
13	1/2” x 5.27”
17	1/2” x 4.185”
19	1/2” x 5.92”
25	1/2” x 5.75”
26	1/2” x 4.75”
27	1/2” x 40”

ITEM	QTY	DESCRIPTION	Mfg. No.
1	2	Plug, 1/8” NPT, Brass	04730-209-07-37
2	1	Rinse Injector Weldment	05700-002-03-42
	1	Gasket	05330-111-42-81
3	2	Vacuum Breaker, 1/2” NPT	04820-003-06-13
4	6	Adapter, 1/2” Fitting x Male	04730-011-59-53
5	3	Elbow, 607, 1/2” Copper to Copper	04730-406-01-01
6	2	Valve, Solenoid, 1/2” NPT, 110 Volt	04810-100-12-18
7	4	Union, 1/2”, Copper to Copper	04730-412-05-01
8	1	Tube, Copper	See Chart
9	1	Tee, Copper, 1/2”	04730-411-01-01
10	1	Tube, Copper	See Chart
11	1	Tube, Copper	See Chart
12	1	Tube, Copper	See Chart
13	1	Tube, Copper	See Chart
14	2	Tee, 1/2” x 1/2” x 1/4”	04730-411-25-01
15	1	Gauge, Pressure, 0-100 PSI	06685-111-88-34
	1	Decal, 15-25 PSI	09905-002-97-74
16	1	Test Cock, Valve, Ball, 1/4” NPT	04810-011-72-67
17	1	Tube, Copper	See Chart
18	1	Plug, 1/4” NPT, Brass	04730-209-01-00
19	1	Tube, Copper	See Chart
20	1	Regulator, Watts, 1/2” (Not used on GP units)	04820-100-04-07
20	1	Elbow, 90°, 1/2” Street Brass (GP units only)	04730-206-08-00
21	1	Plate, Rinse Plumbing	05700-011-82-86
22	2	Gasket	05330-111-42-81
23	1	Elbow, 90° 1/2” Copper to MSPS	04730-406-32-01
24	2	Adapter, Male	04730-401-03-01
25	1	Tube, Copper	See Chart
26	1	Tube, Copper	See Chart
27	1	Tube, Copper	See Chart
28	1	Plate, Deflector	05700-002-62-49

TG SERIES INCOMING RINSE PLUMBING ASSEMBLY



Tube Length Chart

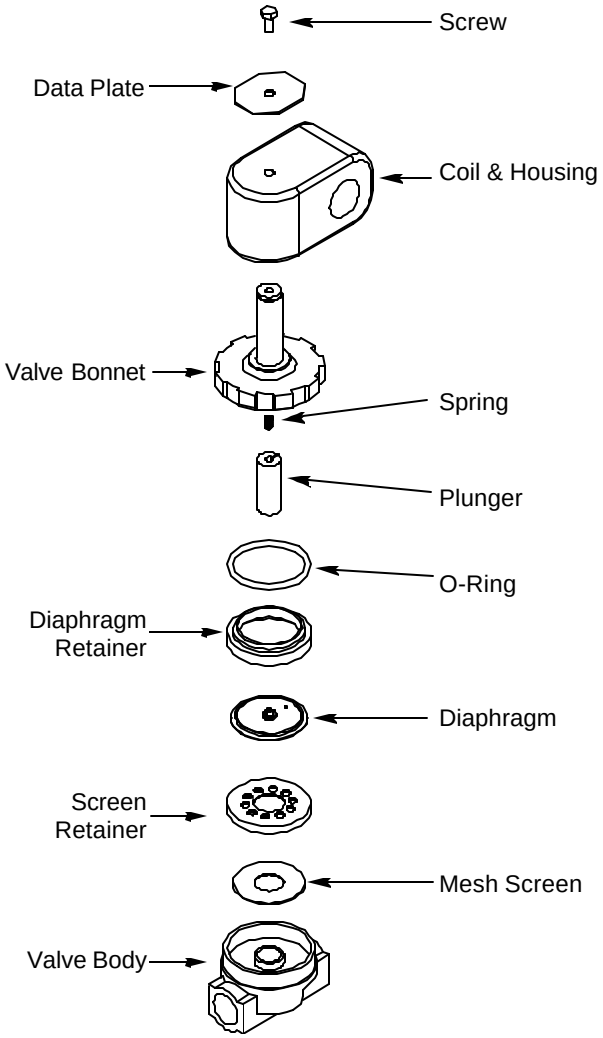
Item #	Length (Inches)
17	3/4" x 2-13/16"
18	3/4" x 3-7/16"
19	3/4" x 2-5/8"
20	3/4" x 3"
21	3/4" x 4-3/4"
22	3/4" x 5-3/4"
23	3/4" x 40"

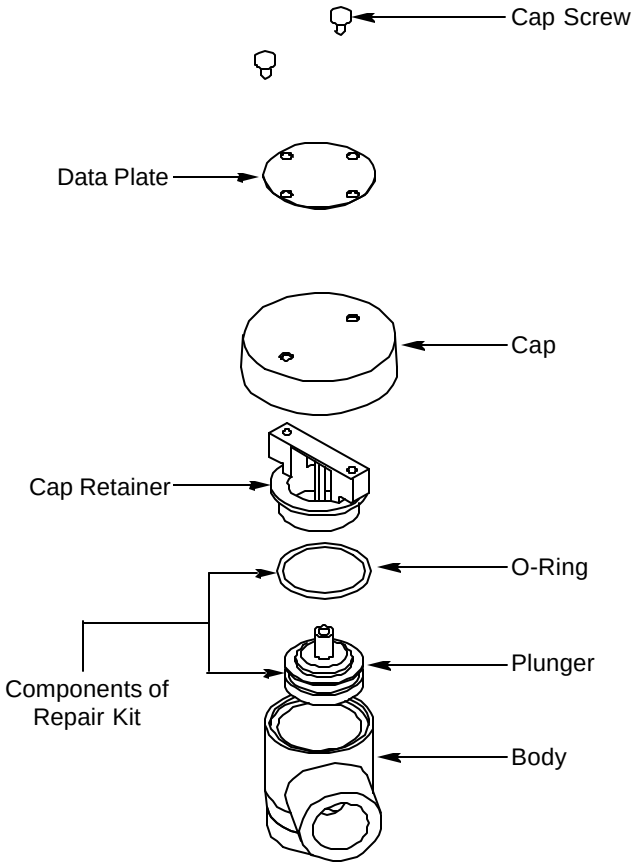
Replacement Kits Notes:
The rinse injector replacement kit comes with the injector weldment, the gasket, (3) brass plugs and hardware for mounting.

TG SERIES INCOMING RINSE PLUMBING ASSEMBLY (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Rinse Injector Weldment Replacement Kit	06401-003-11-84
	1	Gasket	05330-111-42-81
2	3	Plug, 1/8" NPT, Brass	04730-209-07-37
3	2	Vacuum Breaker, 3/4" NPT	04820-002-53-77
4	2	Valve, Solenoid, 3/4" NPT, 110 Volt	04810-100-53-00
5	2	Elbow, 3/4" Street Brass	04730-206-04-34
6	4	Nipple, Close, Brass, 3/4" NPT	04730-207-34-00
7	2	Union, 3/4", NPT Copper to Copper	04730-212-05-00
8	2	Adapter, 3/4" Fitting x Male	04730-401-11-01
9	1	Elbow, 90° 3/4" Copper to MSPS	04730-406-42-01
10	1	Tee, 3/4", CU x CU x CU	04730-411-46-01
11	2	Tee, 3/4" x 3/4" x 1/2"	04730-411-03-01
12	2	Fitting, Adapter, 1/2" to 1/4"	04730-401-41-01
13	1	Plug, 1/4" NPT, Brass	04730-209-01-00
14	1	Test Cock, Valve, Ball, 1/4" NPT	04810-011-72-67
15	1	Gauge, Pressure, 0-100 PSI	06685-111-88-34
16	1	Elbow, 3/4" NPT, 90° Brass	04730-206-13-00
17-23	1	Tube, Copper	See Chart
24	1	Union, 3/4", Copper to Copper	04730-412-06-01
25	1	Elbow, 90° 1/2" Copper to MSPS	04730-406-32-01
26	1	Fill Line Injector Weldment	05700-002-04-71
27	2	Gasket	05330-111-42-81
28	1	Plate, Deflector	05700-002-62-49

RINSE SOLENOID VALVE & VACUUM BREAKER REPAIR PARTS KITS





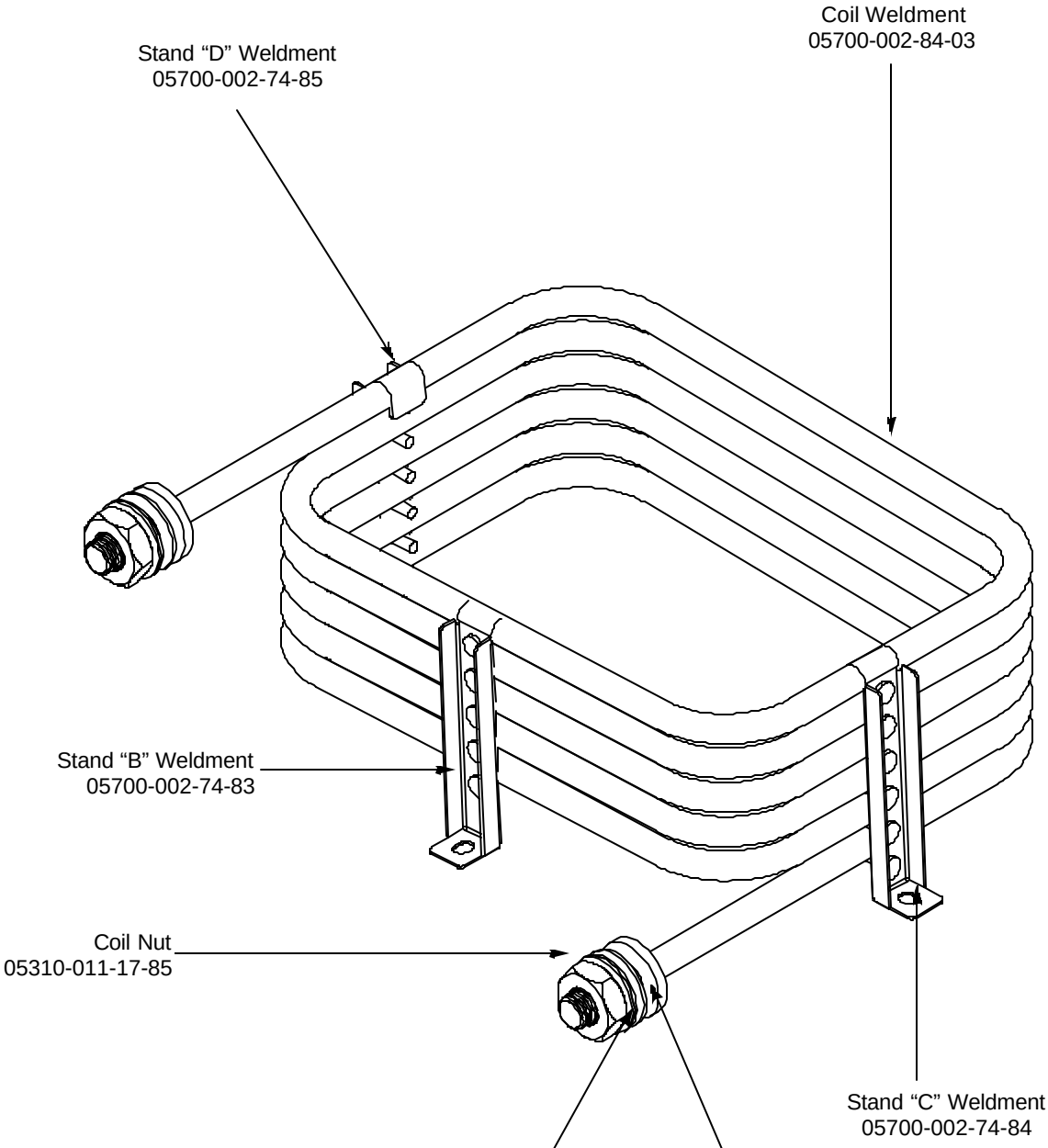
SPECIAL PARTS

Solenoid Valve Plunger Kit
Includes plunger and s
Part number 06401-00
Solenoid Valve Diaphragm Kit
Includes diaphragm an
Part number 06401-00
Solenoid Valve 110 Volt Coil and
Part number 06401-00
Complete Solenoid Valve
Part number 04810-100-1

01-003-06-23

mbly
13 (1/2")

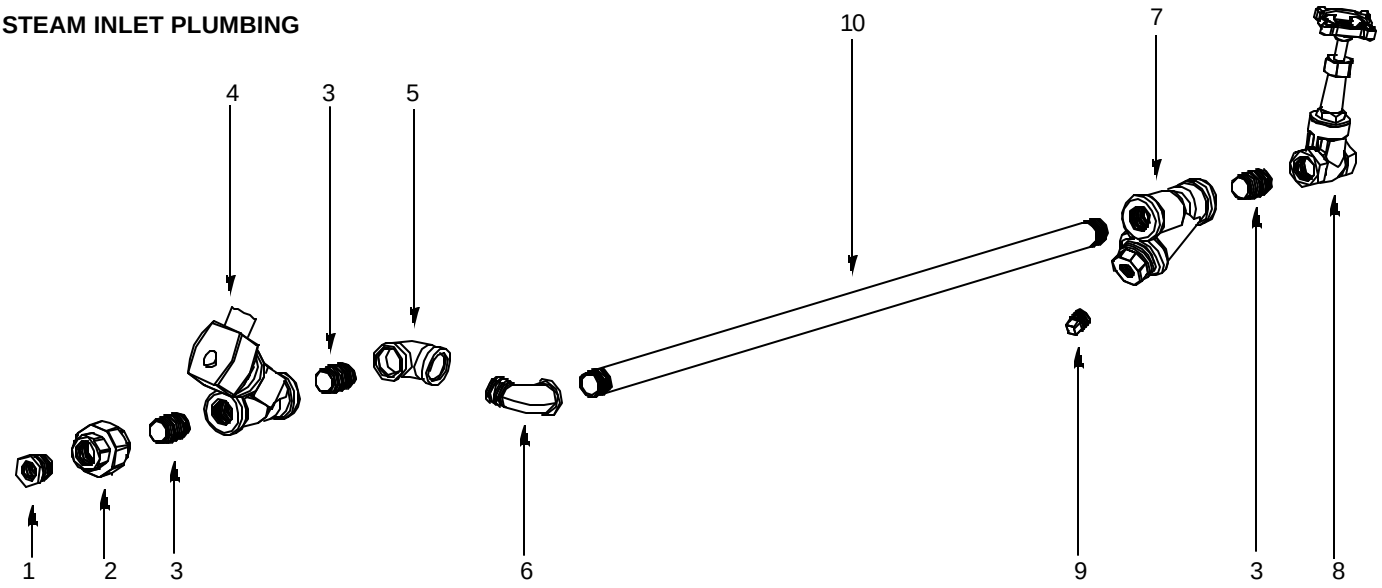
STEAM UNIT WASH TANK COIL ASSEMBLY



SERVICE NOTE: Jackson HIGHLY recommends that the Coil Gaskets be replaced any time the Coil Weldment is replaced or removed for an extended period of time.

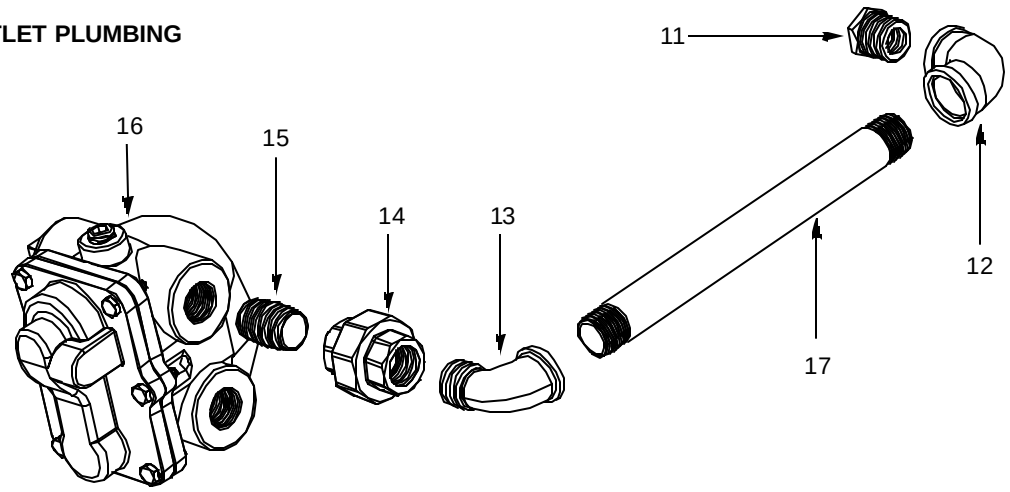
Order the entire assembly using part number 05700-002-11-78.

STEAM INLET PLUMBING



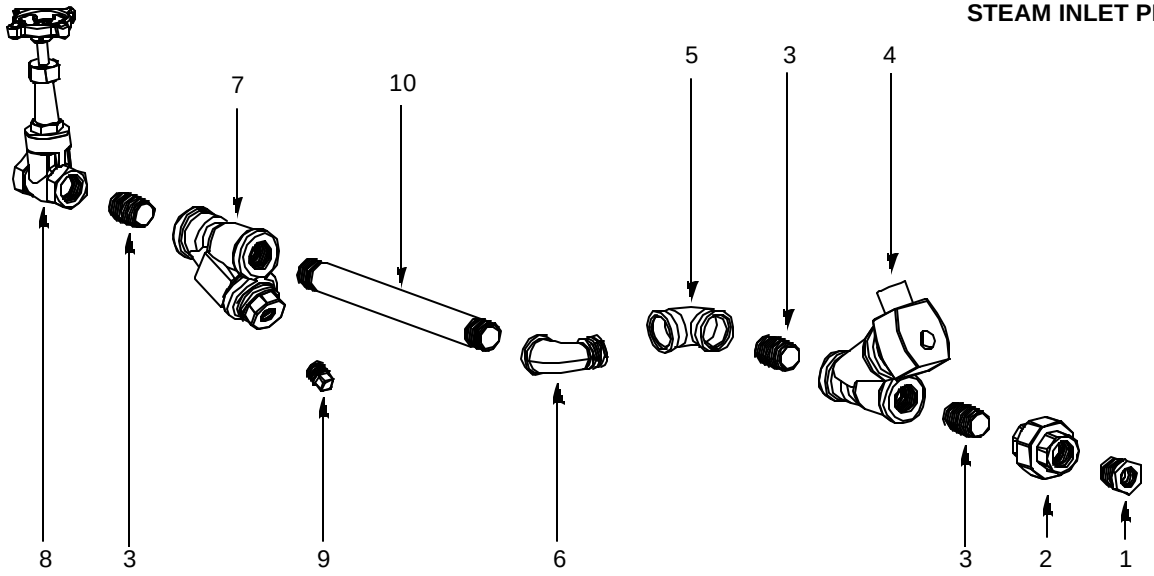
ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Reducer, 3/4” NPT to 1/2” NPT, Black Iron	04730-911-02-34
2	1	Union, 3/4” NPT, Black Iron	04730-912-01-00
3	3	Nipple, Close, 3/4” NPT, Black Iron	04730-907-01-00
4	1	Valve, Steam Solenoid, 3/4” NPT, 120V	04820-011-87-39
5	1	Elbow, 90°, 3/4” FNPT, Black Iron	04730-906-10-34
6	1	Elbow, Street, 90°, 3/4” NPT, Black Iron	04730-011-87-37
7	1	Y-Strainer, 3/4” NPT, Black Iron	04730-217-01-32
8	1	Valve, Gate, Steam, 3/4” NPT	04820-100-19-00
9	1	Plug, 3/8” NPT, Black Iron	04730-909-02-34
10	1	Nipple, 3/4” NPT x 32” Long	04730-002-21-27
11	1	Reducer, 3/4” NPT to 1/2” NPT, Black Iron	04730-911-02-34
12	1	Elbow, 90°, 3/4” FNPT, Black Iron	04730-906-10-34
13	1	Elbow, Street, 3/4” NPT, Black Iron	04730-011-87-37
14	1	Union, 3/4” NPT, Black Iron	04730-912-01-00
15	1	Nipple, Close, 3/4” NPT, Black Iron	04730-907-01-00
16	1	Steam Trap, 3/4” NPT	06680-500-02-77
17	1	Pipe, 3/4” NPT x 10” Long, Black Iron	04730-907-06-34

STEAM OUTLET PLUMBING



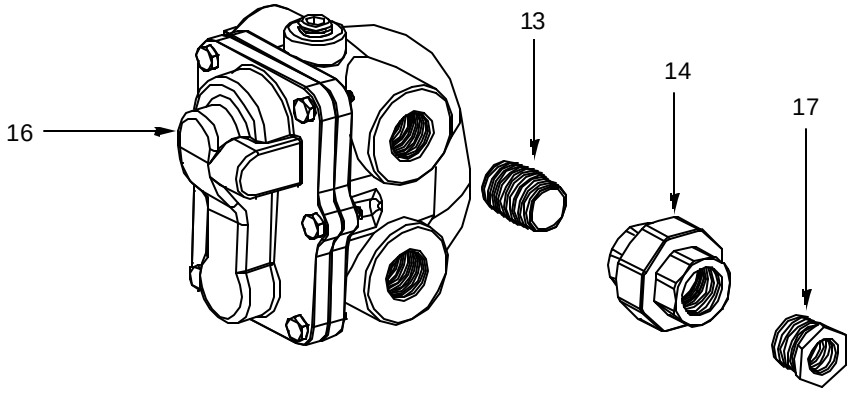
STEAM PLUMBING (RIGHT TO LEFT)

STEAM INLET PLUMBING

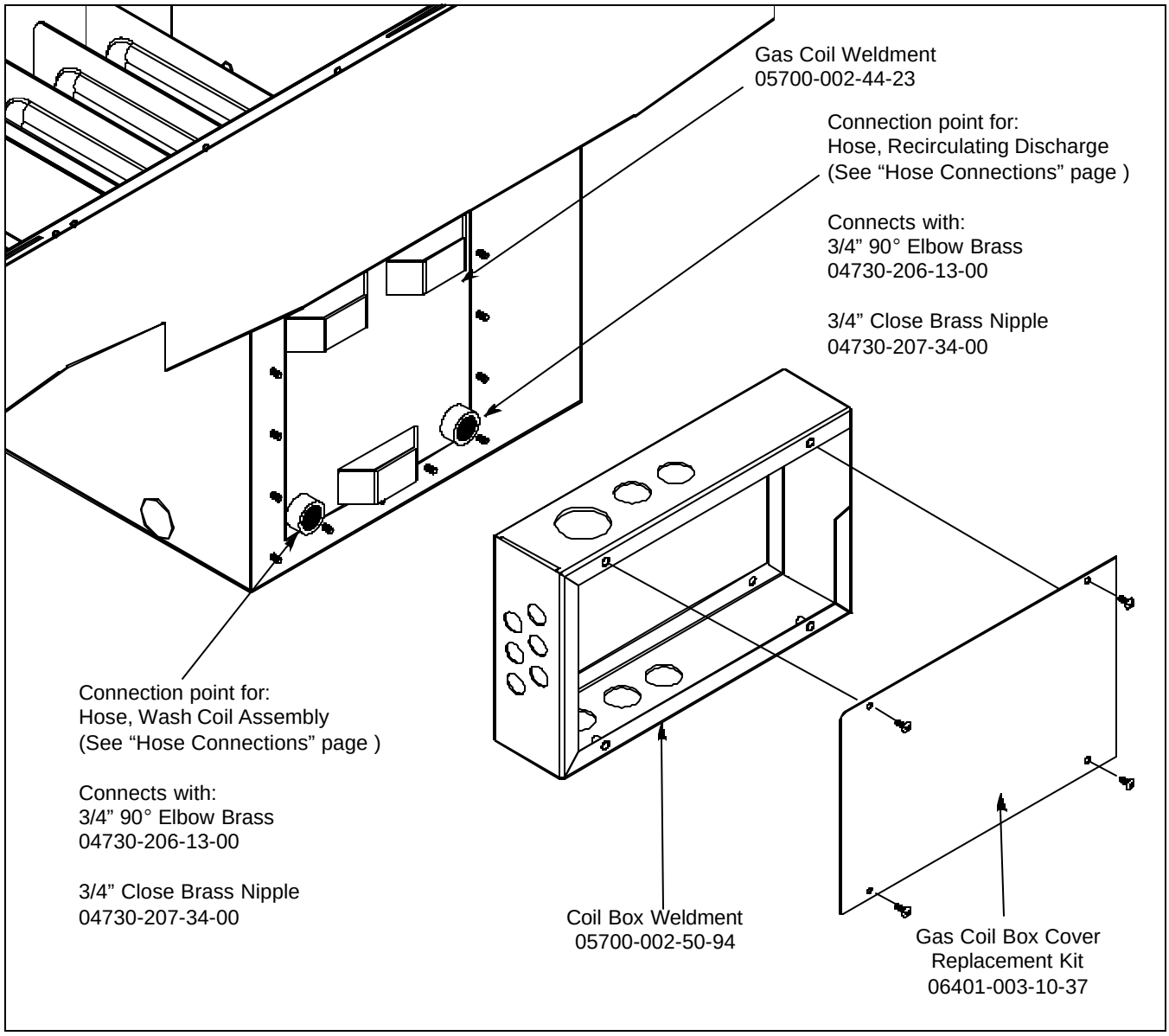


ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Reducer, 3/4” NPT to 1/2” NPT, Black Iron	04730-911-02-34
2	1	Union, 3/4” NPT, Black Iron	04730-912-01-00
3	3	Nipple, Close, 3/4” NPT, Black Iron	04730-907-01-00
4	1	Valve, Steam Solenoid, 3/4” NPT, 120V	04820-011-87-39
5	1	Elbow, 90°, 3/4” FNPT, Black Iron	04730-906-10-34
6	1	Elbow, Street, 90°, 3/4” NPT, Black Iron	04730-011-87-37
7	1	Y-Strainer, 3/4” NPT, Black Iron	04730-217-01-32
8	1	Valve, Gate, Steam, 3/4” NPT	04820-100-19-00
9	1	Plug, 3/8” NPT, Black Iron	04730-909-02-34
10	1	Nipple, 3/4” NPT x 10” Long	04730-907-06-34
11	1	Reducer, 3/4” NPT to 1/2” NPT, Black Iron	04730-911-02-34
12	1	Elbow, 90°, 3/4” FNPT, Black Iron	04730-906-10-34
13	1	Elbow, Street, 3/4” NPT, Black Iron	04730-011-87-37
14	1	Union, 3/4” NPT, Black Iron	04730-912-01-00
15	1	Nipple, Close, 3/4” NPT, Black Iron	04730-907-01-00
16	1	Steam Trap, 3/4” NPT	06680-500-02-77
17	1	Pipe, 3/4” NPT x 10” Long, Black Iron	04730-907-06-34

STEAM OUTLET PLUMBING



GAS COIL ASSEMBLY (TG MODELS)

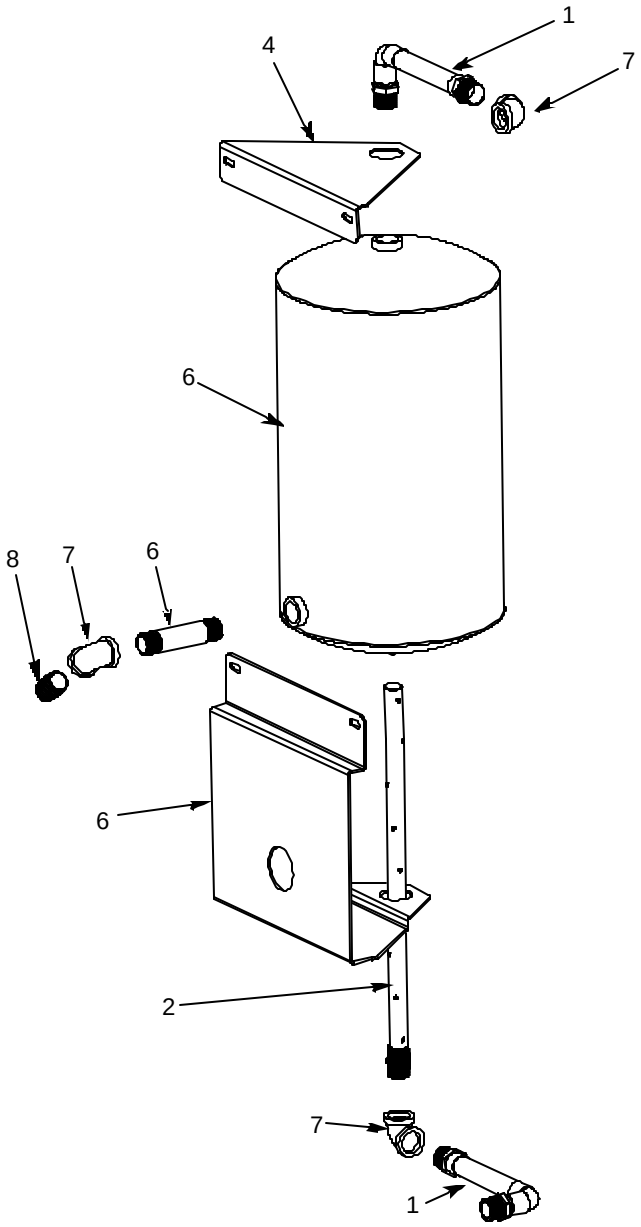


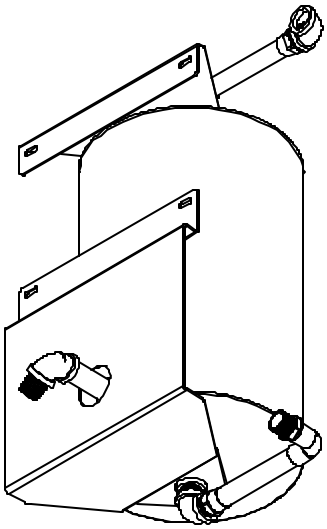
Other items used but not shown.

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Thermostat, High Limit	05930-011-49-43
2	1	Terminal Board	05940-002-78-97
3	1	Thermostat Bracket	05700-011-81-64
4	1	Decal, Thermostat Regulating	09905-011-84-31
5	1	Thermostat, Wash Regulating	06401-140-00-32
6	2	Fitting, 1/4”, Imperial Brass	05310-924-02-05

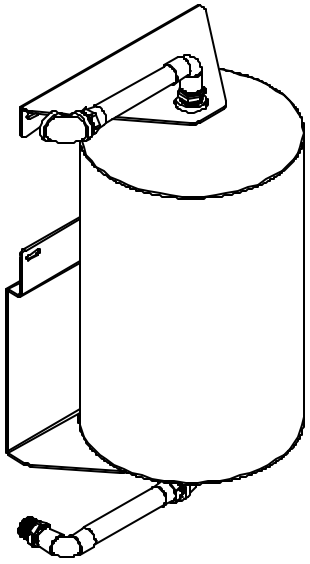
SECTION 6: PARTS SECTION

TANK, RINSE BOOSTER (TG MODELS ONLY)





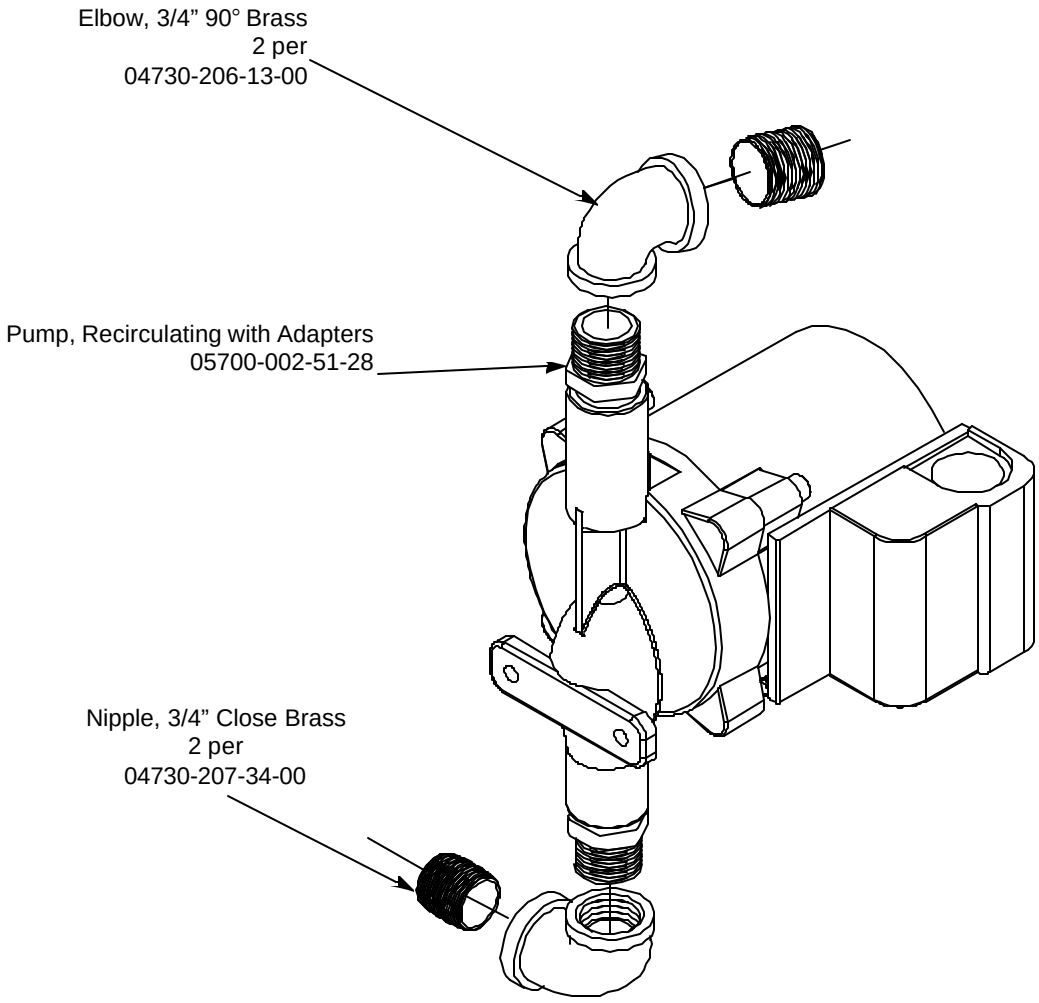
BOTTOM ANGLED VIEW



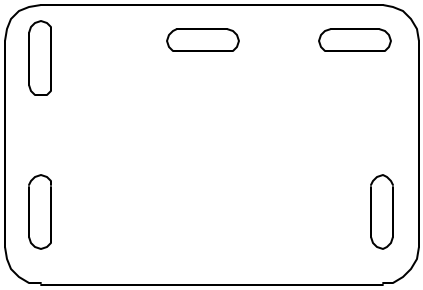
TOP ANGLED VIEW

ITEM	QTY	DESCRIPTION	Mfg. No.
1	2	Plumbing Assembly, Inlet/Discharge, Rinse Tank	05700-002-51-24
2	1	Tube, Dispersion Weldment	05700-002-46-16
3	1	Tank, GP Rinse	05700-002-45-05
4	1	Bracket, Upper Rinse Tank	05700-002-67-13
5	1	Bracket, Lower Rinse Tank	05700-002-67-14
6	1	Nipple, 3/4” NPT x 4” Long	04730-207-05-00
7	3	Elbow, 3/4” NPT, 90° Brass	04730-206-13-00
8	1	Nipple, 3/4” NPT x Closed Brass	04730-207-34-00

RECIRCULATING PUMP ASSEMBLY (TG MODELS ONLY)

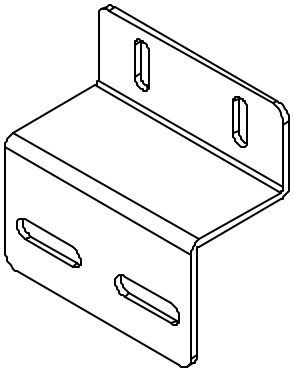


Used on AJ-44CGP, AJ-66CGP, AJ-80CGP units right to left units and the AJ-44CGP left to right unit.



Mounting Bracket
05700-002-25-74

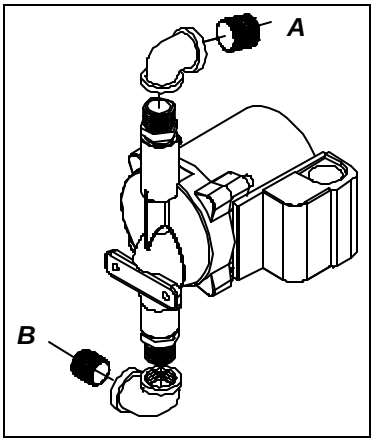
Used only on AJ-66CGP/AJ-80CGP <u>left to right</u> units.



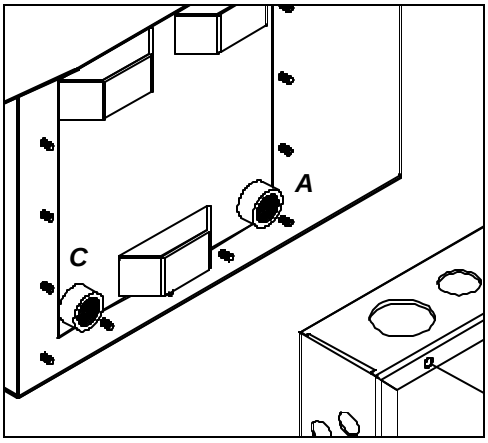
Mounting Bracket
05700-002-23-61

SECTION 6: PARTS SECTION

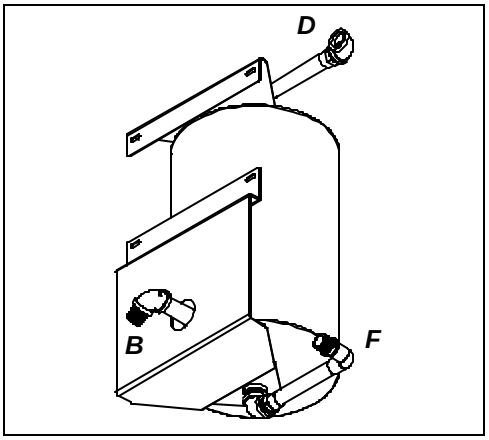
HOSE CONNECTIONS (TG MODELS ONLY)



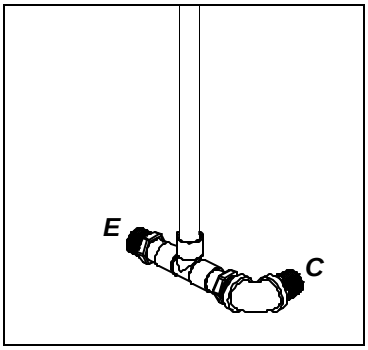
Recirculating Pump Assembly



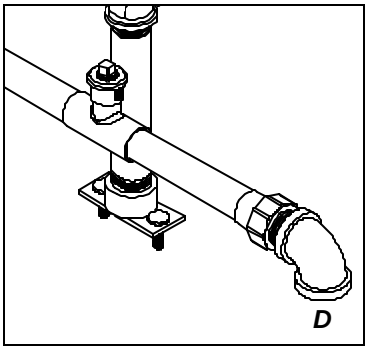
Gas Coil Weldment



Rinse Booster Tank



Rinse Header Plumbing Assembly



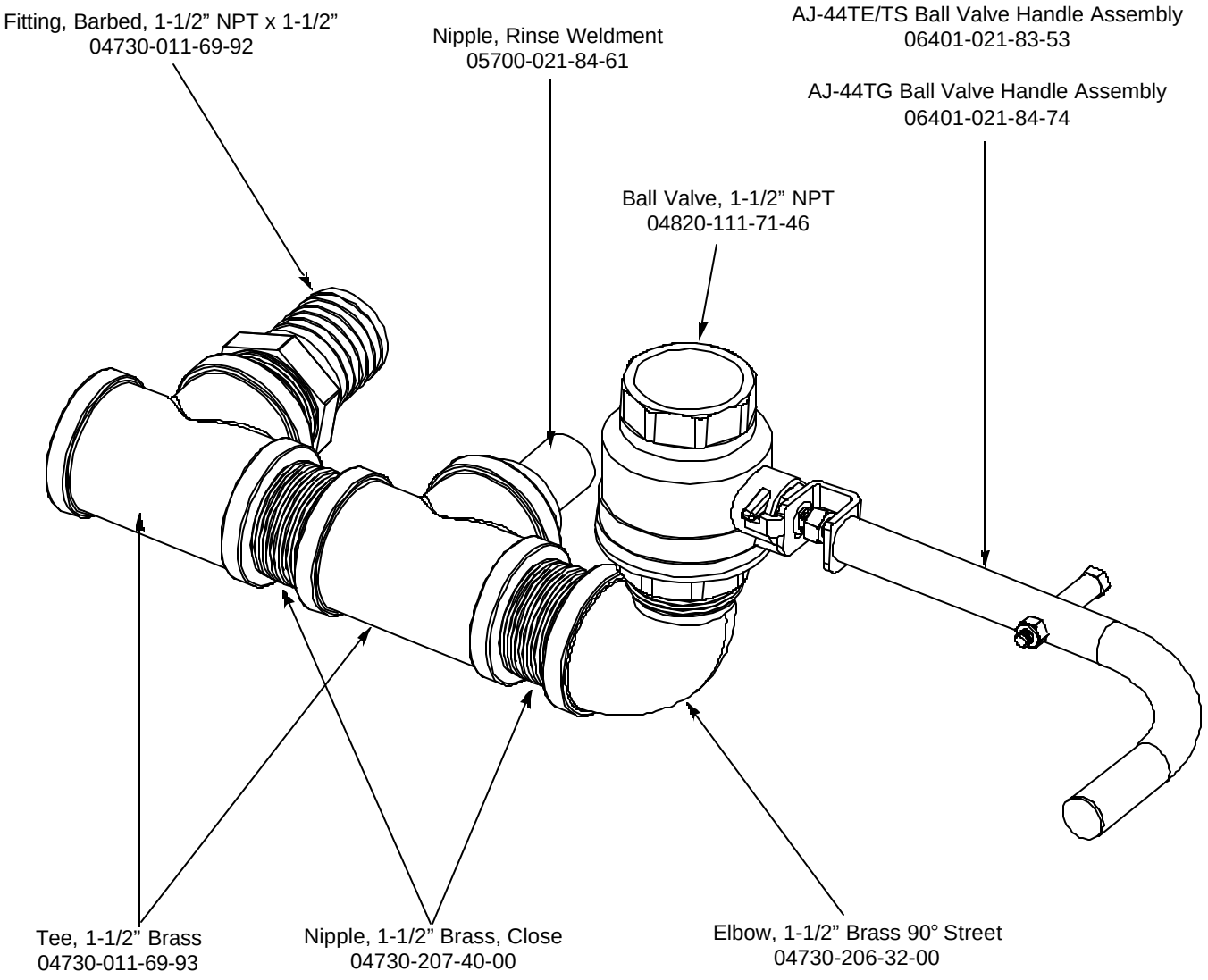
Wash/Fill Plumbing Assembly

HOSE ASSEMBLIES	AJ-44TG (L-R & R-L)	AJ-66TG (L-R)	AJ-66TG (R-L)
*Each hose assembly includes 2, 3/4” Pushlock Fittings (part number 04730-011-94-00).			
A - Hose, Recirculating Discharge	(8 1/2”) 05700-002-52-74	(18”) 05700-002-51-38	(8 1/2”) 05700-002-52-74
B - Hose, Recirculating Pump Suction	(18 1/2”) 05700-002-52-75	(26”) 05700-002-51-37	(18 1/2”) 05700-002-52-75
C - Hose, Wash Coil Assembly	(34”) 05700-002-52-76	(36”) 05700-002-51-39	(50”) 05700-002-57-58
D - Hose, Recirculating Discharge	(L-R 48”) 05700-003-03-95 (R-L 60”) 05700-003-03-97	(60”) 05700-003-03-97	(60”) 05700-003-03-97

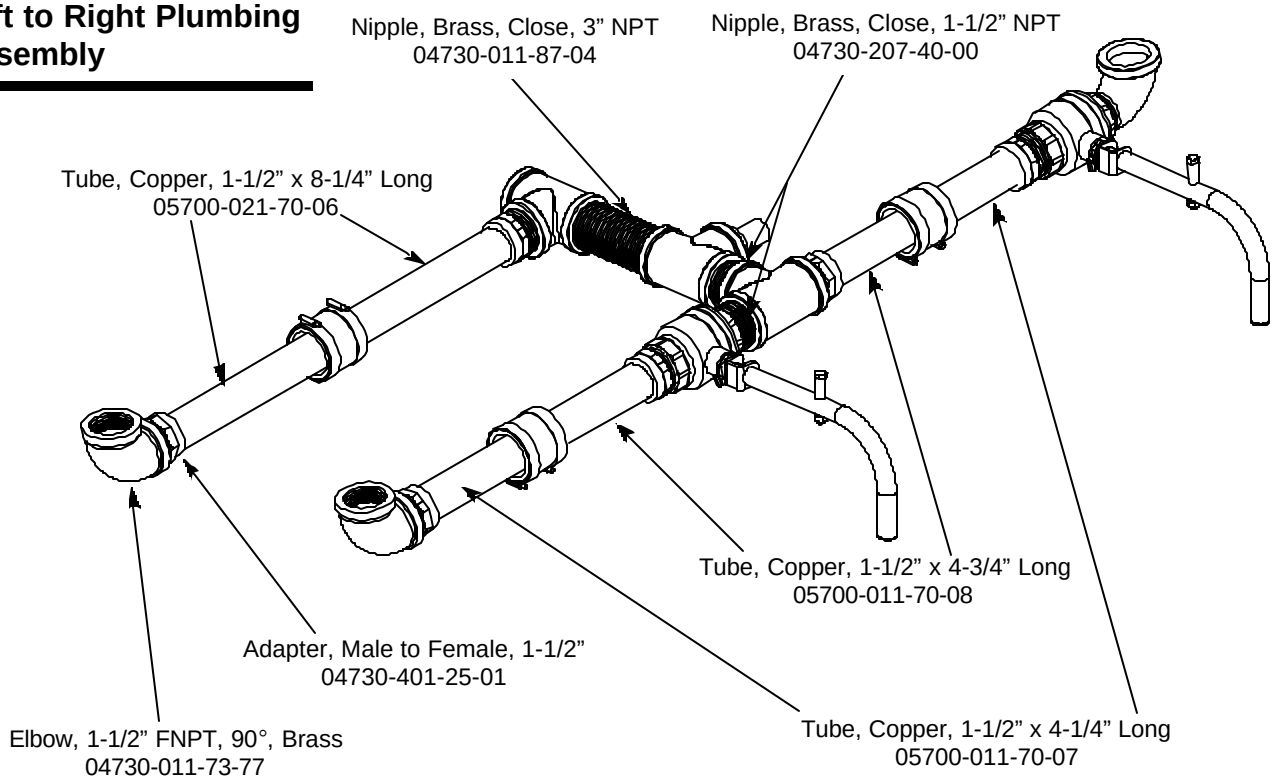
E - Hose connection to existing gas booster outlet fitting.

F - Hose connection to existing gas booster inlet fitting.

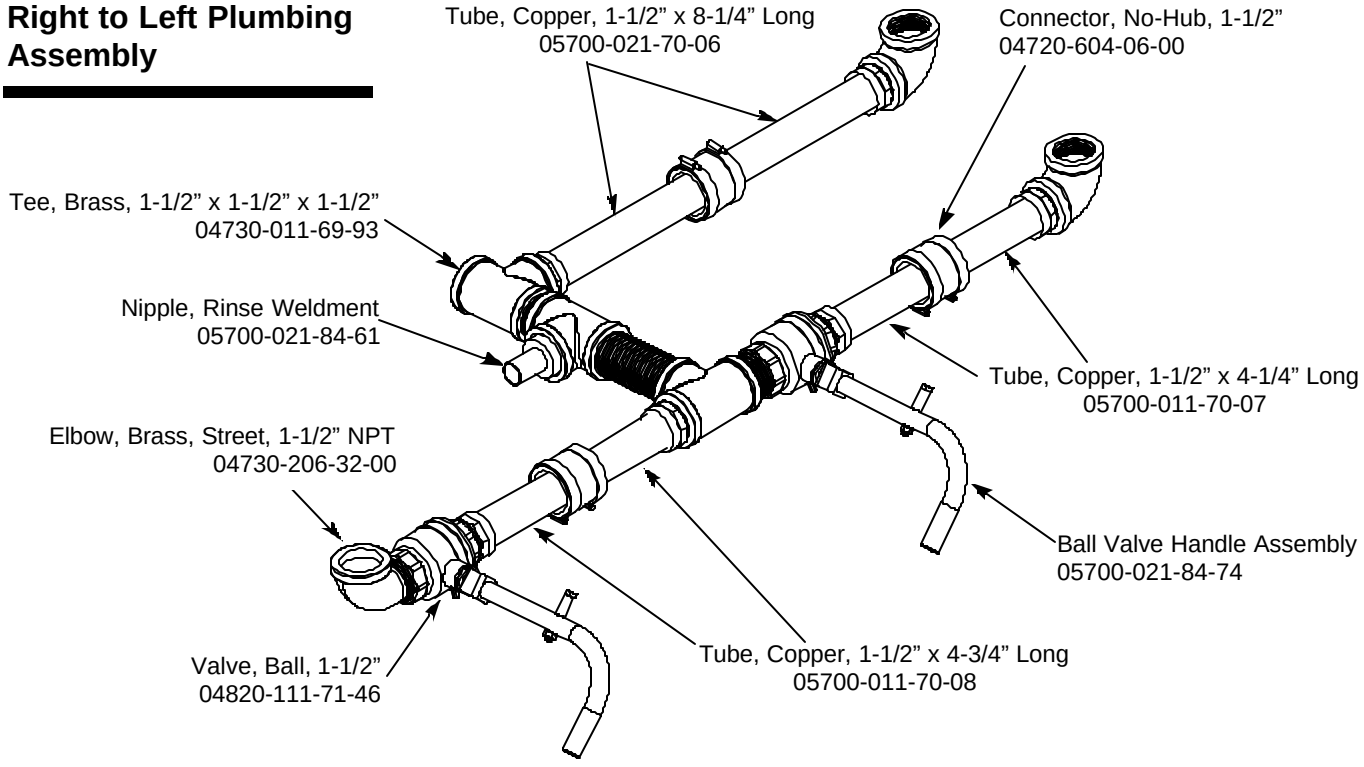
Gas Booster Connection Kit 05700-002-51-73 includes:
18 Feet of 3/4” Hose
4 - 3/4” Push Lock Fittings

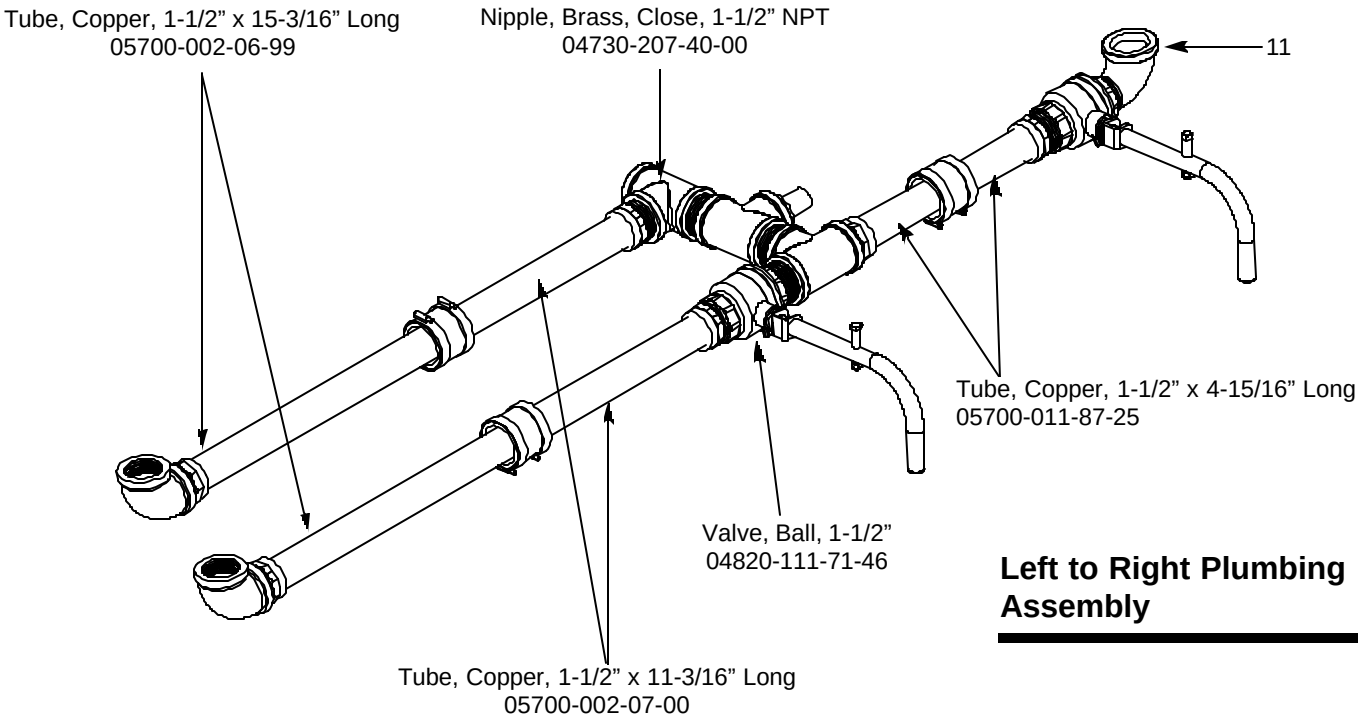

Fitting, Barbed, 1-1/2” NPT x 1-1/2”
04730-011-69-92
Nipple, Rinse Weldment
05700-021-84-61
AJ-44TE/TS Ball Valve Handle Assembly
06401-021-83-53
AJ-44TG Ball Valve Handle Assembly
06401-021-84-74
Ball Valve, 1-1/2” NPT
04820-111-71-46
Tee, 1-1/2” Brass
04730-011-69-93
Nipple, 1-1/2” Brass, Close
04730-207-40-00
Elbow, 1-1/2” Brass 90° Street
04730-206-32-00

Left to Right Plumbing Assembly



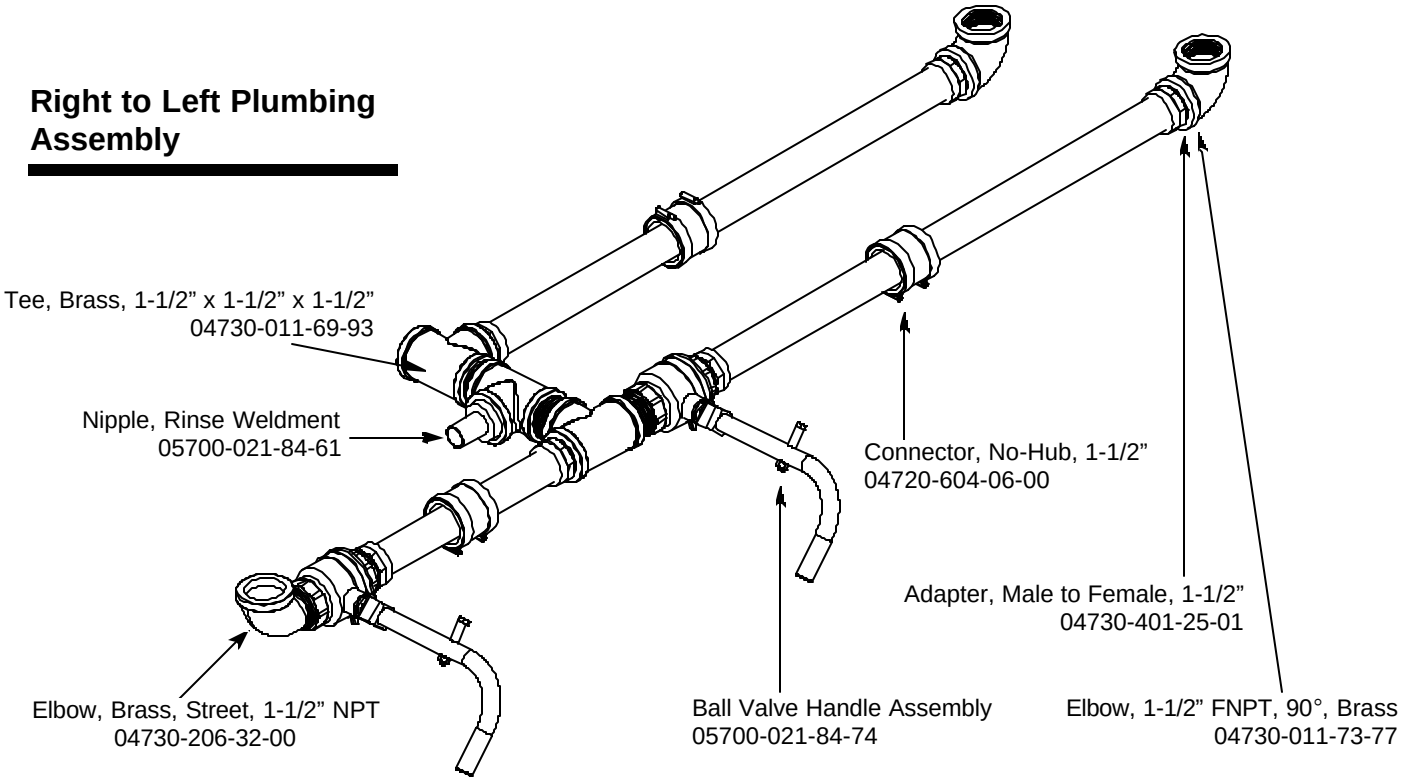
Right to Left Plumbing Assembly





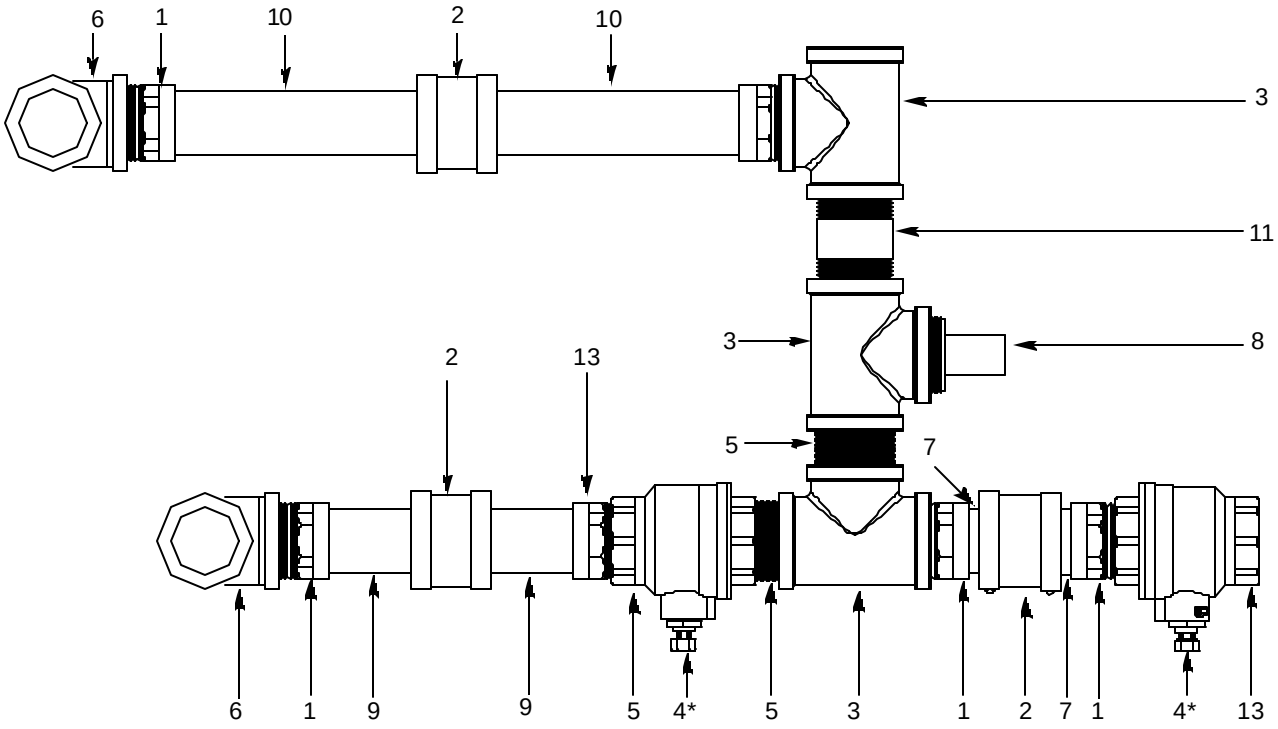
Left to Right Plumbing Assembly

Right to Left Plumbing Assembly



SECTION 6: PARTS SECTION

AJ-66TG (LEFT TO RIGHT) DRAIN PLUMBING ASSEMBLY

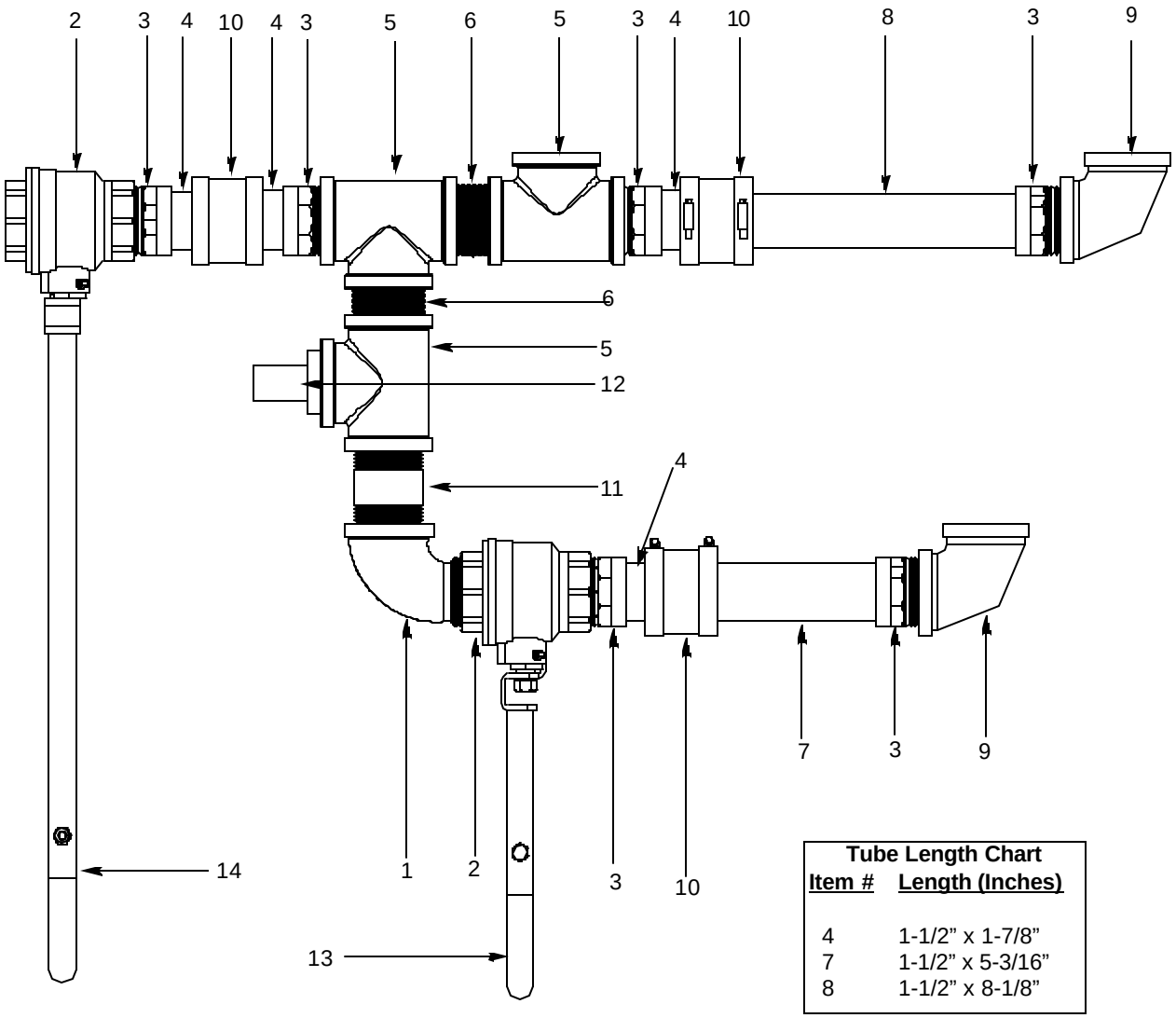


ITEM	QTY	DESCRIPTION	Mfg. No.
1	6	Adapter, Male to Female, 1-1/2”	04730-401-25-01
2	3	No-Hub Connector	04720-604-06-00
3	3	Tee, Brass, 1-1/2” FNPT	04730-011-69-93
4	2	Ball Valve, 1-1/2” FNPT	04820-011-71-46
*	2	Valve Handle Weldment Assembly (Not Shown)	06401-021-84-74
5	2	Nipple, Brass, Close, 1-1/2” NPT	04730-207-40-00
6	2	Elbow, Brass, 90°, 1-1/2” FNPT	04730-011-73-77
7	2	Tube, Copper, 1-1/2” x 1-3/4” Long	See Service Note
8	1	Rinse Nipple Weldment	05700-021-84-61
9	2	Tube, Copper, 1-1/2” x 3-1/2” Long	See Service Note
10	2	Tube, Copper, 1-1/2” x 7-1/2” Long	See Service Note
11	1	Nipple, Brass, 1-1/2” NPT x 3” Long	04730-011-87-04

Service Note: Copper tubing should be purchased locally and cut to length (lengths provided in parts list above).

SECTION 6: PARTS SECTION

AJ-66TG (RIGHT TO LEFT) DRAIN PLUMBING ASSEMBLY



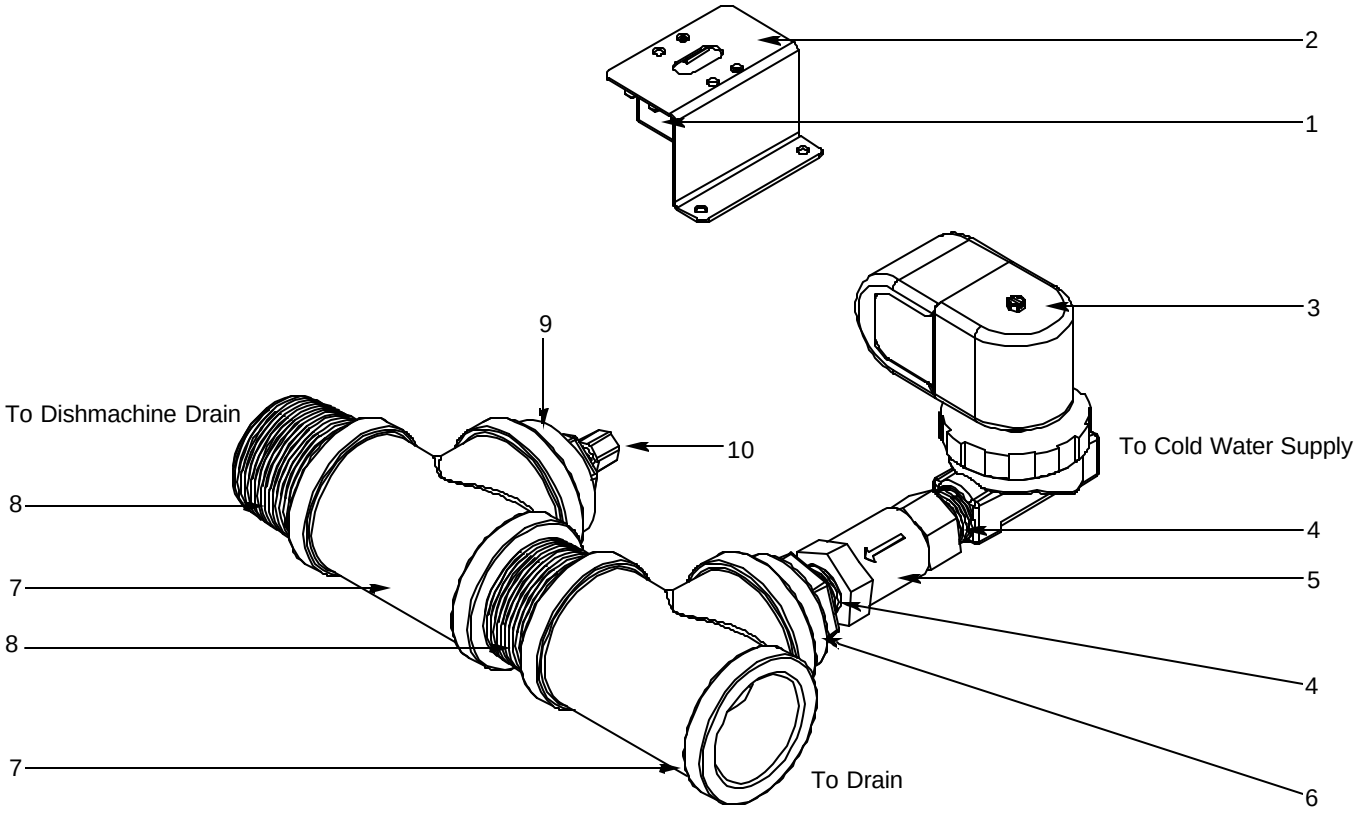
Tube Length Chart

Item #	Length (Inches)
4	1-1/2” x 1-7/8”
7	1-1/2” x 5-3/16”
8	1-1/2” x 8-1/8”

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Elbow, 1-1/2” NPT, Brass, Street	04730-206-32-00
2	2	Valve, Ball, 1-1/2” FNPT	04820-011-71-46
3	6	Adapter, Male to Female, 1-1/2”	04730-401-25-01
4	4	Tube, Copper	See Chart
5	3	Tee, Brass, 1-1/2” FNPT	04730-011-69-93
6	2	Nipple, Brass, 1-1/2” NPT, Close	04730-207-40-00
7	2	Tube, Copper	See Chart
8	2	Tube, Copper	See Chart
9	2	Elbow, Brass, 90°, 1-1/2” FNPT	04730-011-73-77
10	3	No-Hub Connector	04720-604-06-00
11	1	Nipple, Brass, 1-1/2” NPT x 3” Long	04730-011-87-04
12	1	Rinse Nipple Weldment	05700-021-84-61
13	1	Valve Handle Weldment Assembly	06401-021-84-74
14	1	Valve Handle Weldment Assembly	06401-002-57-83

SECTION 6: PARTS SECTION

DRAIN QUENCH SYSTEM



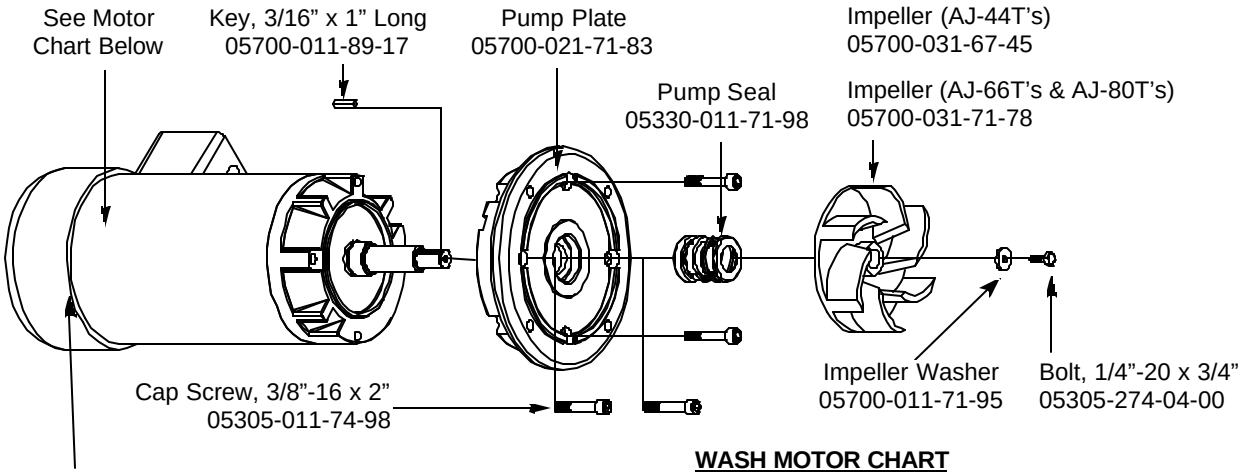
From the existing drain, attach the two additional Tees (Item 7) using the 1-1/2" NPT Close Nipples (Item 8). Tighten the Reducers (Items 6 & 9) into the Tees as shown above. Attach the Modified Compression Fitting (Item 10) into the 1-1/2" to 1/4" Reducer (Item 9). Position the bulb of the thermostat (Item 1) so that it rests approximately 1/4" from the bottom of the Tee (Item 7). Tighten the Modified Compression Fitting (Item 10) as required.

Mount the Thermostat (Item 1) to the tub using the Thermostat Bracket (Item 2) and set it for 120°F - 140°F. Install the Solenoid Valve (Item 3) to the second Tee (Item 7) and then attach to the incoming cold water line. Use pipe dope or thread tape as required to prevent any leaks.

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Thermostat	05930-121-67-72
2	1	Thermostat Bracket	05700-011-81-64
3	1	Solenoid Valve	04810-100-09-18
4	2	Nipple, Close, 1/2" NPT, Brass	04730-207-15-00
5	1	Valve, Check, 1/2"	04820-002-55-77
6	1	Reducer, 1-1/2" to 1/2"	04730-002-55-75
7	2	Tee, 1-1/2" x 1-1/2" x 1-1/2"	04730-011-69-93
8	2	Nipple, 1-1/2", Close, Brass	04730-207-40-00
9	1	Reducer, 1-1/2" to 1/4"	04730-002-55-76
10	1	Modified Compression Fitting	05700-001-16-52
	1	Complete Kit	06401-002-44-07

SECTION 6: PARTS SECTION

MOTOR ASSEMBLIES

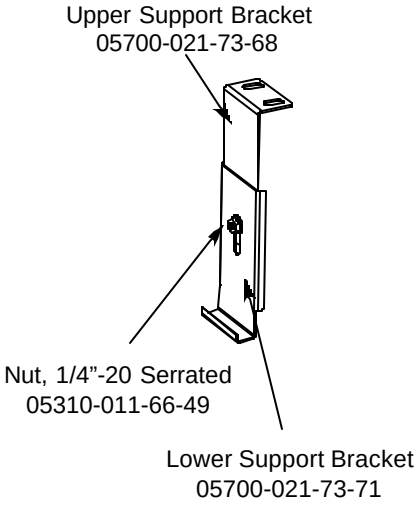


WASH MOTOR CHART

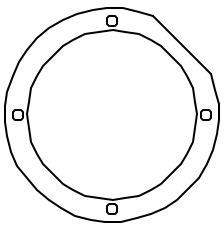
Volts	Phase	Hz	Part Number	Kit Part Number
200 - 440	3	50	06105-121-81-34	06401-003-09-96
208 - 230	1	60	06105-021-70-57	06401-003-09-97
200 - 230	3	60	06105-121-70-58	06401-003-09-98
380	3	60	06105-121-81-34	06401-003-09-96
460	3	60	06105-121-70-58	06401-003-09-98
600	3	60	06105-002-48-31	06401-003-09-99

Complete Assembly
05700-021-73-42

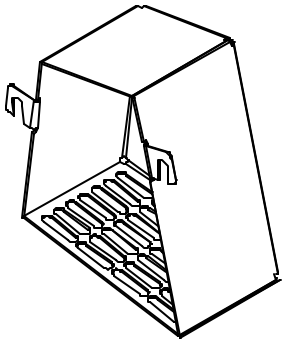
PREWASH MOTOR CHART



Model(s)	Volts	Phase	Hz	Part Number	Kit Part Number
AJ-66T's	208-230	3	50	06105-121-70-56	06401-003-10-38
	380	3	50	06105-121-81-34	06401-003-10-39
	415	3	50	06105-121-81-34	06401-003-10-39
	440	3	50	06105-121-70-56	06401-003-10-38
	208-230	1	60	06105-121-70-55	06401-003-10-40
	200-230	3	60	06105-121-70-56	06401-003-10-38
	380	3	60	06105-121-70-56	06401-003-10-38
	460	3	60	06105-121-70-56	06401-003-10-38
	600	3	60	06105-002-48-31	06401-003-10-41
AJ-80T's	208-230	3	50	06105-121-81-34	06401-003-10-39
	380	3	50	06105-121-81-34	06401-003-10-39
	415	3	50	06105-121-81-34	06401-003-10-39
	440	3	50	06105-121-81-34	06401-003-10-39
	208-230	1	60	06105-121-70-57	06401-003-10-42
	200-230	3	60	06105-121-70-58	06401-003-10-43
	380	3	60	06105-121-81-34	06401-003-10-39
	460	3	60	06105-121-70-58	06401-003-10-43
	600	3	60	06105-002-48-31	06401-003-10-41

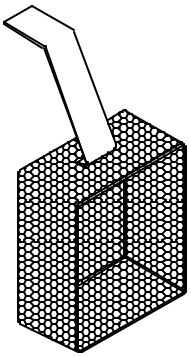


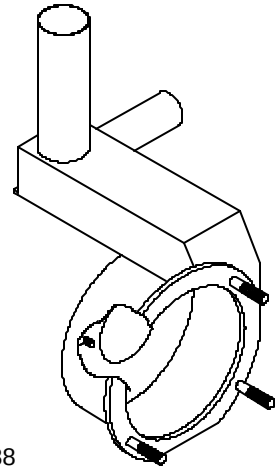
Motor Mounting Gasket
05330-011-71-62



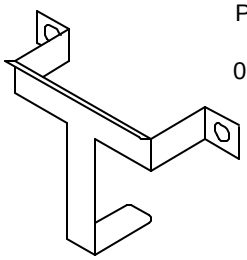
Intake Suction Scoop Weldment
05700-021-87-60

Prewash Intake
Strainer Weldment
05700-021-74-96

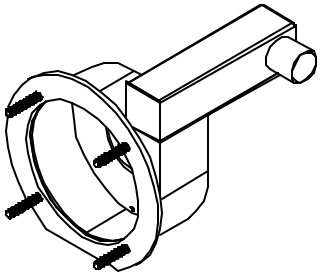




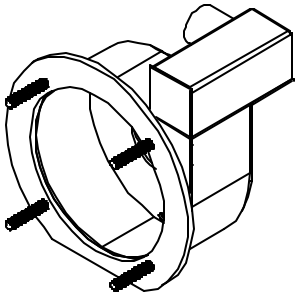
Wash Pump
Weldment
05700-041-68-88



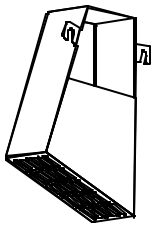
Prewash Strainer
Bracket
05700-021-74-94



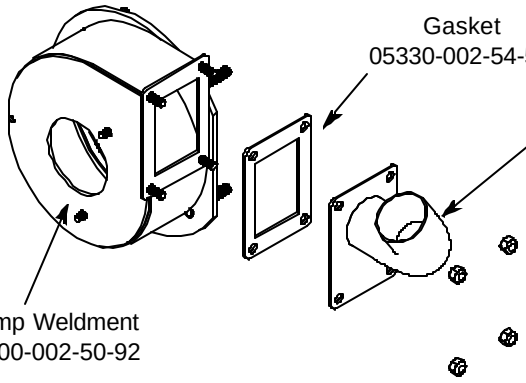
Prewash Pump Weldment
AJ-66/AJ-80 Left to Right models:
05700-002-10-62



Prewash Pump Weldment
AJ-66/AJ-80 Right to Left models:
05700-002-11-96



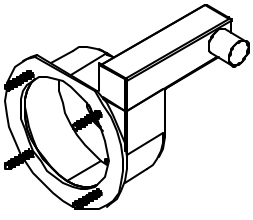
Scoop, Intake Suction Wash
Weldment
05700-002-51-20



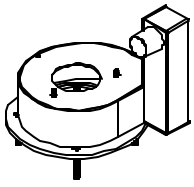
Gasket
05330-002-54-55

Pump Discharge
Weldment
05700-002-90-05

Wash Pump Weldment
05700-002-50-92

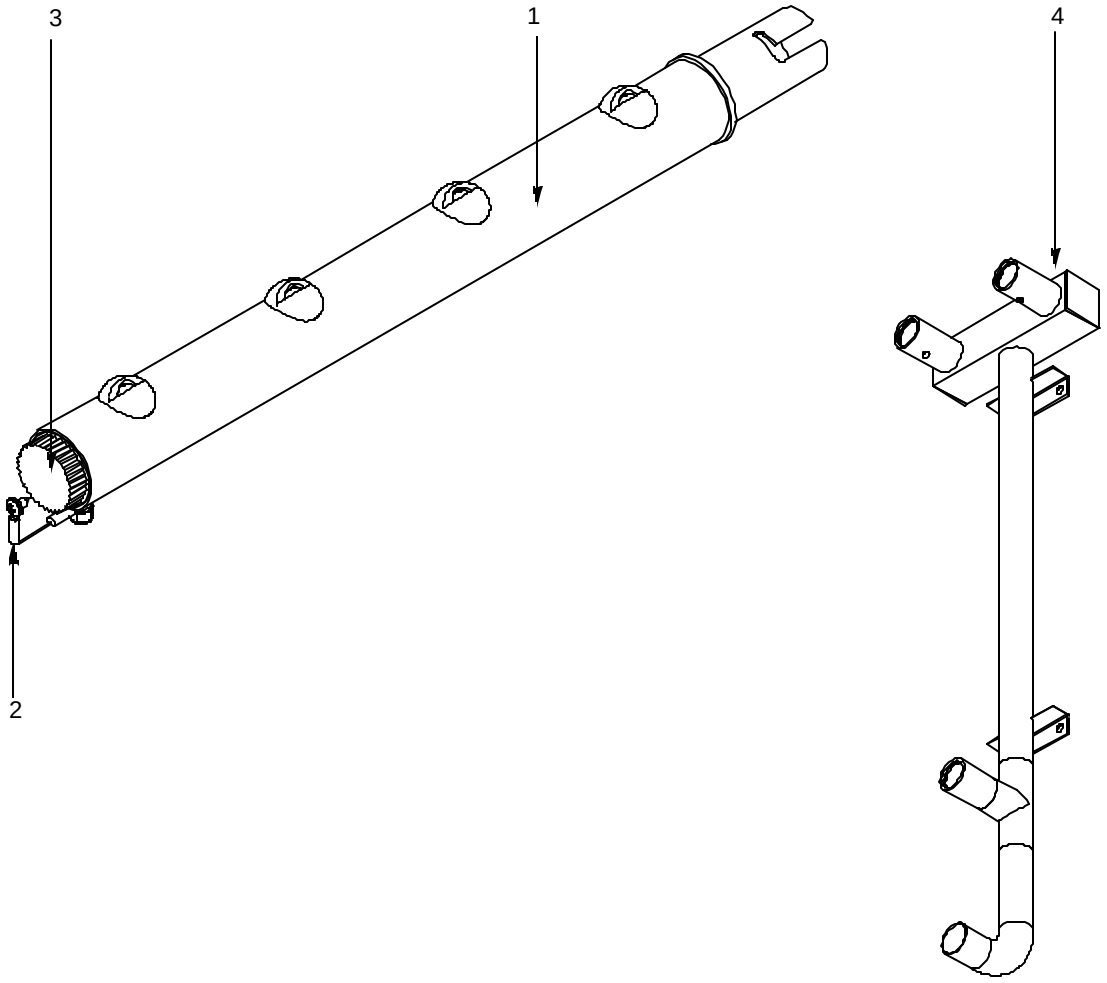


Prewash Pump Weldment
AJ-66TG Left to Right model
05700-002-43-56



Prewash Pump Weldment
AJ-66TG Right to Left model
05700-002-42-69

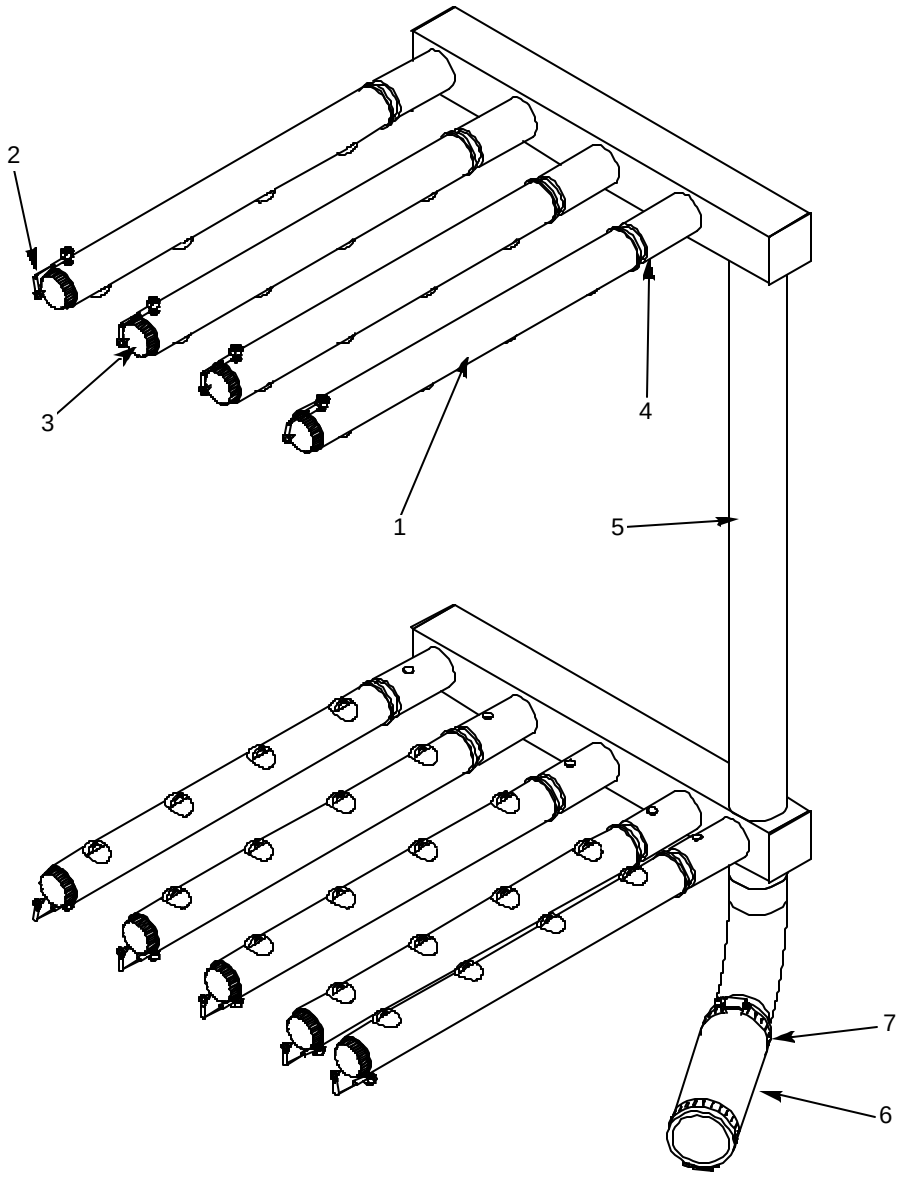
PREWASH ARM/MANIFOLD ASSEMBLY (AJ-66T & AJ-80T MODELS ONLY)



SERVICE NOTE: When replacing the 10-32 screws in the End Caps, it is recommended that a thread locking fluid be used to ensure that the screws do not back out during normal operation.

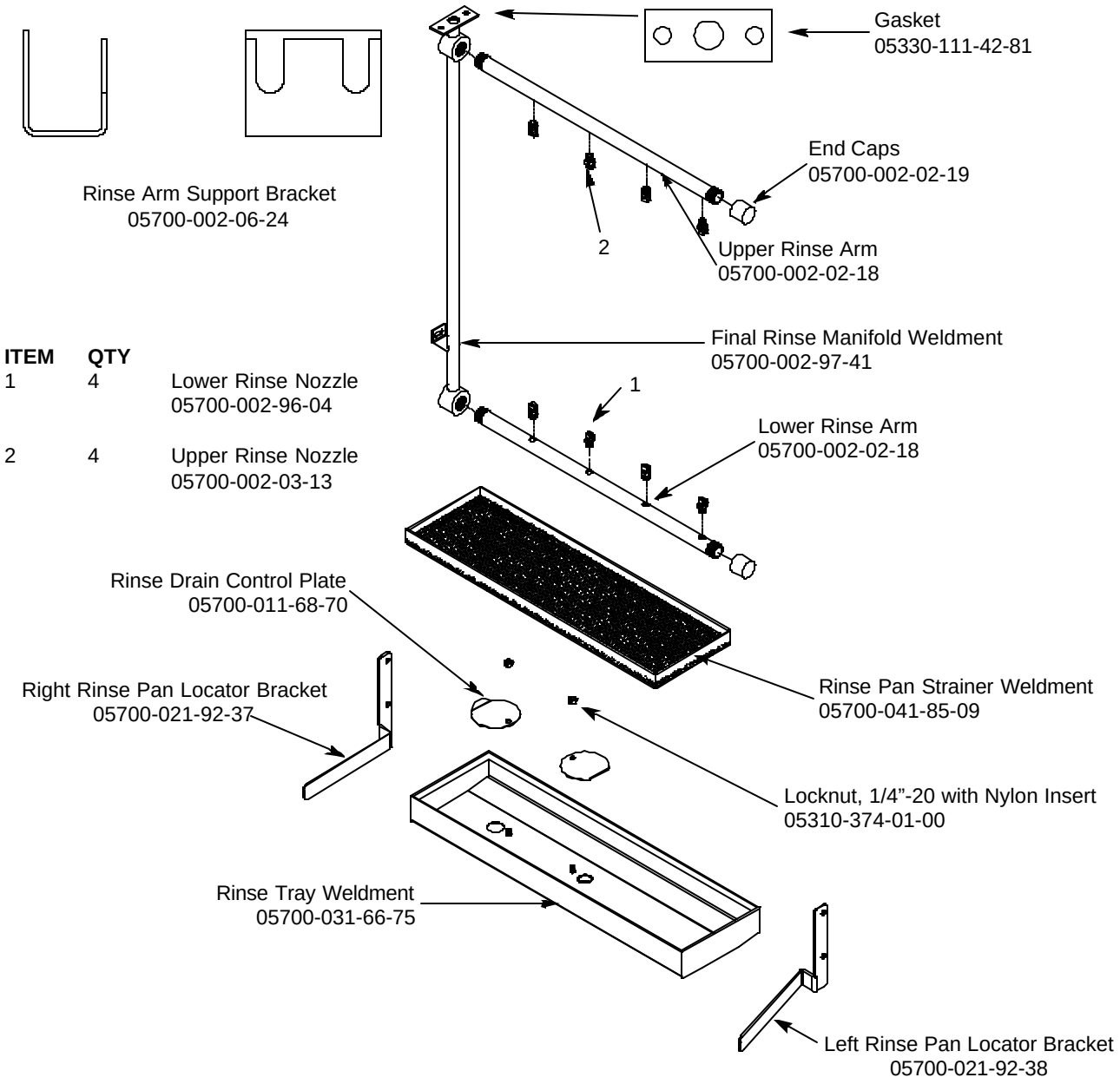
ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Wash Arm Weldment	05700-002-95-25
2	1	Lanyard	05340-011-72-46
3	1	Cap, Threaded	04730-603-12-00
		Items 1 through 3 + Hardware	05700-002-95-19
	1	O-ring (Not Shown)	05330-400-12-08
4	1	Prewash Manifold Weldment	05700-003-01-66

WASH ARM/MANIFOLD ASSEMBLY



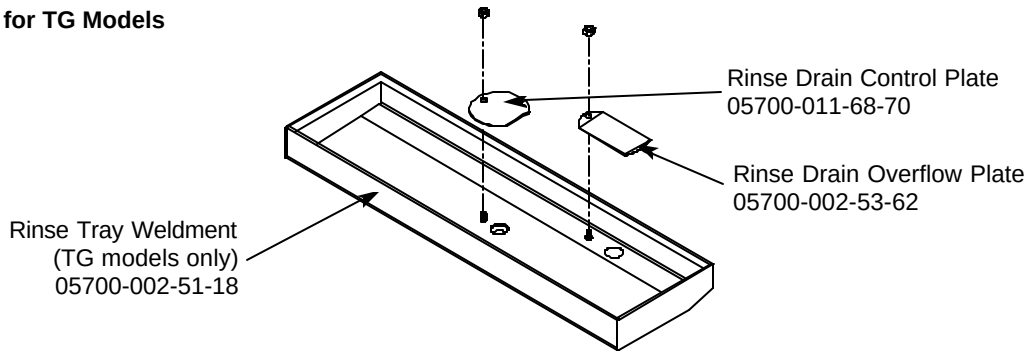
ITEM	QTY	DESCRIPTION	Mfg. No.
	9	Wash Arm Assembly	05700-002-95-19
	9	Screw, 10-32 x 3/8” Long Phillips Truss Head	05305-173-12-00
	9	Locknut, 10-24 S/S Hex with Nylon Insert	05310-373-01-00
1	9	Wash Arm Weldment	05700-002-95-25
2	9	Lanyard	05340-011-72-46
3	9	End Cap, Wash Tube	05700-011-67-11
4	9	O-ring	05330-400-12-08
5	1	Wash Manifold Weldment	
		Left to Right	05700-002-95-20
		Right to Left	05700-002-95-66
6	1	Hose, 2” X 6.75” Manifold Pump	05700-002-90-79
7	2	Clamp, Hose 1-9/16” TO 2-1/2”	04730-011-34-89

FINAL RINSE ASSEMBLY

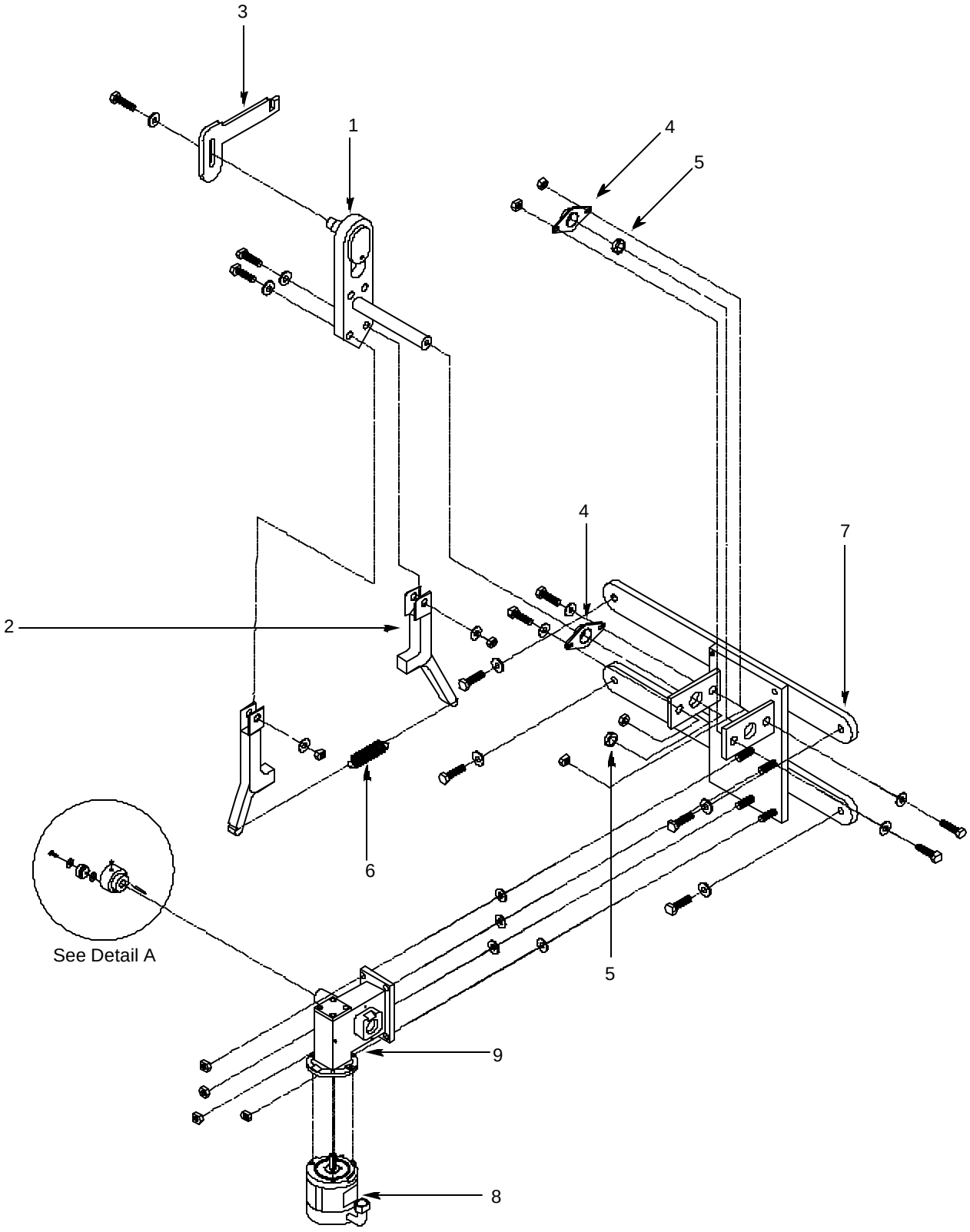


ITEM	QTY	
1	4	Lower Rinse Nozzle 05700-002-96-04
2	4	Upper Rinse Nozzle 05700-002-03-13

Optional Parts for TG Models

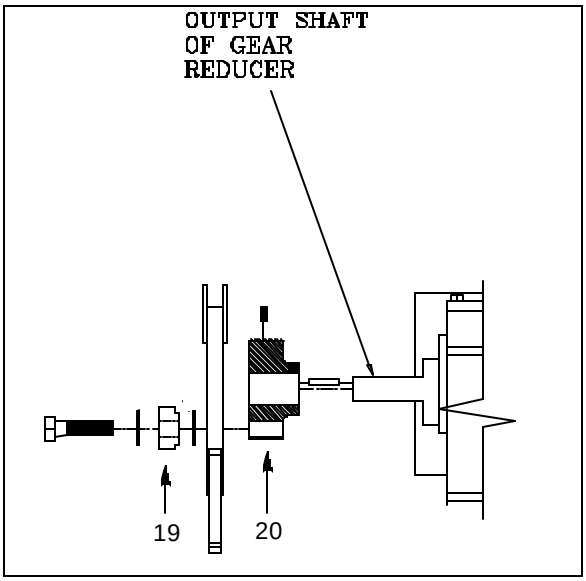


DRIVE ASSEMBLY

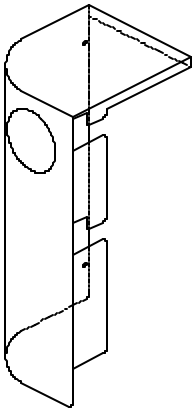


ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Drive Plate and Rod Weldment	05700-003-06-84
2	2	Coupling & Expansion Leg Weldment	05700-021-67-50
3	1	Pawl Bar Drive Linkage Casting	09515-021-87-73
4	2	Pillow Block	06401-003-08-50
5	2	Shaft Collar	05700-011-89-18
6	1	Drive Spring	05315-011-83-51
7	1	Drive Motor Mounting Bracket	05700-031-73-56
8	1	Drive Motor (50 Hz Models)	06401-003-08-41
	1	Drive Motor (208-230 Volt, 60 Hz, Single Phase)	06401-003-08-42
		Drive Motor (208-230 Volt, 60 Hz, Three Phase Models)	06401-003-08-40
		Drive Motor (460 Volt, 60 Hz, Three Phase Models)	06401-003-08-43
		Drive Motor (600 Volt, 60 Hz, Three Phase Models)	06401-002-48-32
9	1	Gear Drive	06105-011-71-88
10	1	Roller Bearing	03120-011-71-81
11	1	Drive Hub	05700-011-67-97
*		Complete Drive Assembly	05700-003-06-83

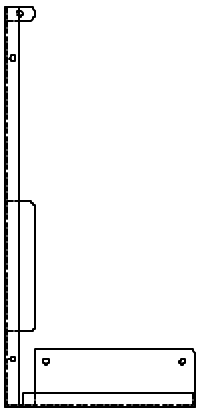
Decal, Drive Adjuster
09905-021-72-24



Detail A



Front Drive Motor Cover
Replacement Kit
06401-003-11-64



Rear Drive Motor Cover
Replacment Kit
06401-003-10-18

Replacement Kits Notes:
The replacement kits for the drive motor covers come with the weldments and the mounting hardware.

LUBRICATION CHART FOR DRIVE GEAR

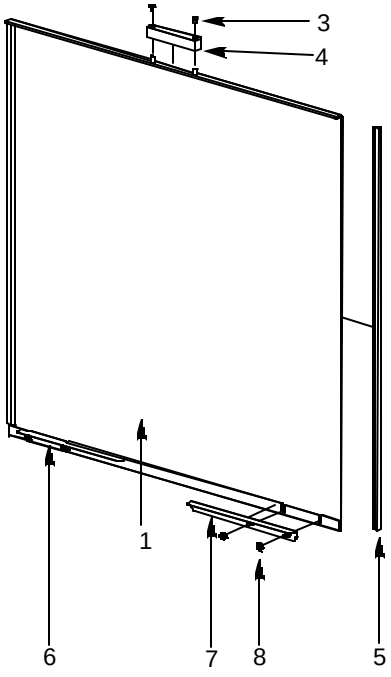
Note: The maintenance procedures detailed here are manufacturer's instructions for the WINSMITH brand of gear reducer that is installed on the rack conveyors covered in this manual.

Ambient Temperature	-30 - 15°F	16 - 50°F	51 - 95°F	51 - 95°F	96 - 131°F	96 - 131°F
Final Stage Worm Speed[1]	up to 2000 FPM	up to 2000 FPM	up to 450 FPM	above 450 FPM	up to 450 FPM	above 450 FPM
ISO Viscosity Grade	220	460	680	460	680	460
AGMA Lubricant No.	5S	#7 Compounded	#8 Compounded	#7 Compounded	8S	7S
Mobil	SHC 630	600W Super Cylinder	Extra Hecla Super	600W Super Cylinder	SHC 636	SHC 634
American Lubricants	SHC-90W	AGMA #7 Gear Oil	AGMA #8 Gear Oil	AGMA #7 Gear Oil	N/A	N/A
Castrol	Tribol 800/220	Tribol 1105-7C	Tribol 1105-8C	Tribol 1105-7C	Tribol 800/680	Tribol 800/460
Chevron	Tegra 220	Cylinder Oil W460	Cylinder Oil W680	Cylinder Oil W460	Tegra 680	Tegra 460
Conoco	Syncon R & O 220	Inca Oil 460	Inca Oil 680	Inca Oil 460	N/A	Syncon R & O 460
Exxon (Esso)	Teresstic SHP220	Spartan EP 460	Spartan EP 680	Spartan EP 460	Teresstic SHP 680	Teresstic SHP 460
Fiske Brothers	SPO-MG	SPO-277	SPO-288	SPO-277	N/A	N/A
Shell	Omala RL 220	Valvata J 460	Valvata J 680	Valvata J 460	Omala RL 680	Omala RL 460
Texaco	Pinnacle 220	Vanguard 460	Vanguard 680	Vanguard 460	Pinnacle 680	Pinnacle 460

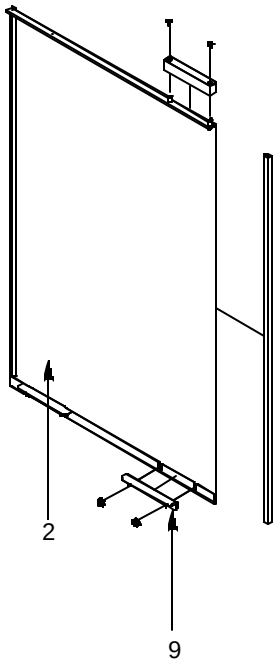
(1) The sliding velocity in feet per minute (FPM) for standard ratios is determined by multiplying the speed of the worm in RPM by the factor from the table below. For selecting proper lubricant, use the speed of the worm in the final stage (input RPM divided by the first stage ratio).

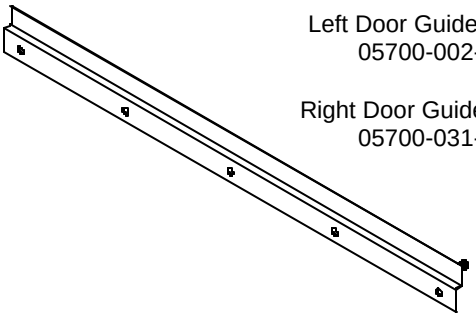
SECTION 6: PARTS SECTION

DOOR ASSEMBLIES



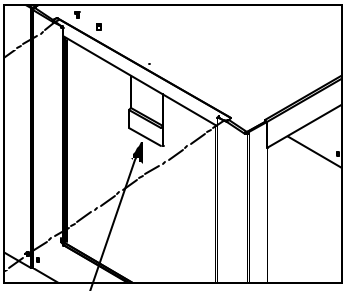
Locknut, 1/4”-20 with Nylon Insert
05310-374-01-00



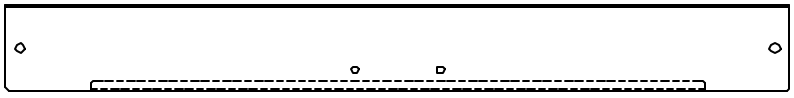


Left Door Guide Weldment
05700-002-32-51

Right Door Guide Weldment
05700-031-76-44

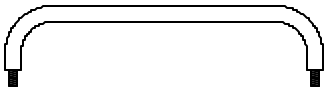


Door Catch Weldment
05700-031-84-80



Wash Door Hood Support: 05700-031-84-13
22” Prewash Door Hood Support: 05700-031-84-14

Door Stiffener (Not Shown) 05700-031-83-43

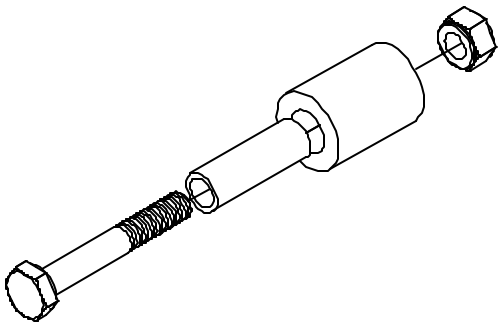


Wash Door Handle Weldment
05700-011-82-63

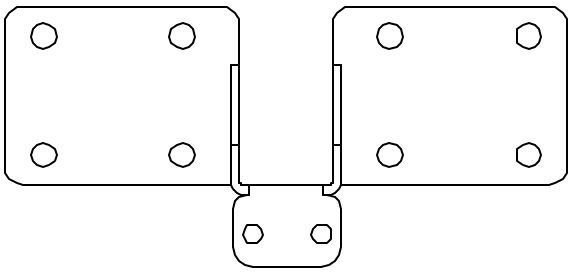
Prewash Door Handle Weldment
05700-011-80-45

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Wash Door Weldment	05700-003-13-47
2	1	Prewash Door Weldment (AJ-66 & AJ-80’s)	
		Left to Right Model	05700-003-13-43
		Right to Left Model	05700-003-13-40
3	1	Screw, 8-32 x 1/4” Long	05305-172-09-00
4	1	Door Switch Magnet	05700-111-51-68
5	1	Door Guide	05700-111-70-92
6	1	Bracket, Right Door Stop Weldment	05700-002-96-33
7	1	Bracket, Left Door Stop Weldment	05700-002-96-32
8	4	Locknut, 10-24 SS Hex with Nylon Insert	05310-373-01-00
9	2	Bracket, Pre Wash Door Stop	05700-002-05-46

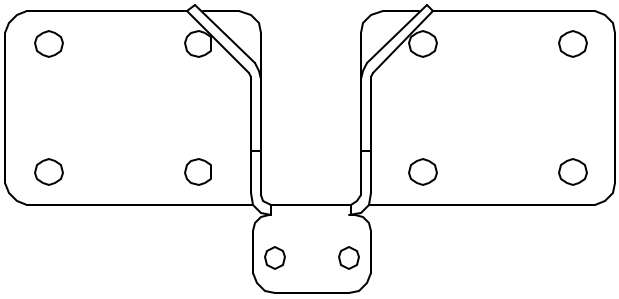
Pawl Bar Roller Replacement Kit
06401-003-11-80



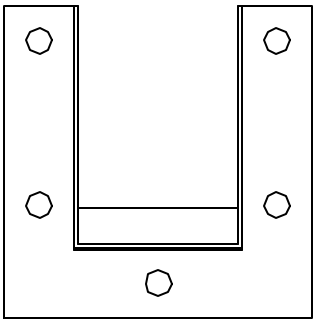
Replacement Kit Notes:
The replacement kit for the pawl bar roller comes with the roller, roller shaft, hardware and locknut as shown.



Pawl Bar Bracket (without tabs) Weldment
05700-031-92-36

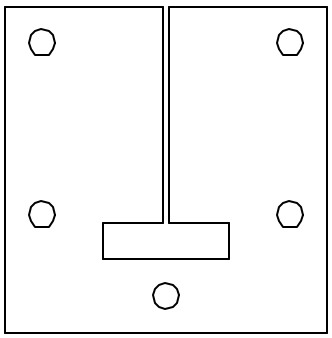


Pawl Bar Bracket (with studs) Weldment
05700-031-84-68



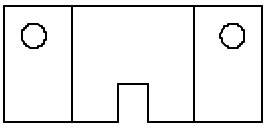
Pawl Bar Gutter Weldment Replacement Kit
06401-003-09-95

Replacement Kits Notes:
The pawl bar gutter weldment replacement kit contains the weldment, a gasket and the mounting hardware. The guide block kit contains both blocks and a gasket.



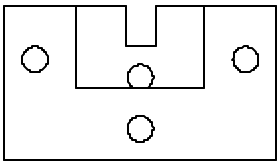
Pawl Bar Gutter Gasket
05330-011-68-55

Guide Block Replacment Kit
06401-003-10-15



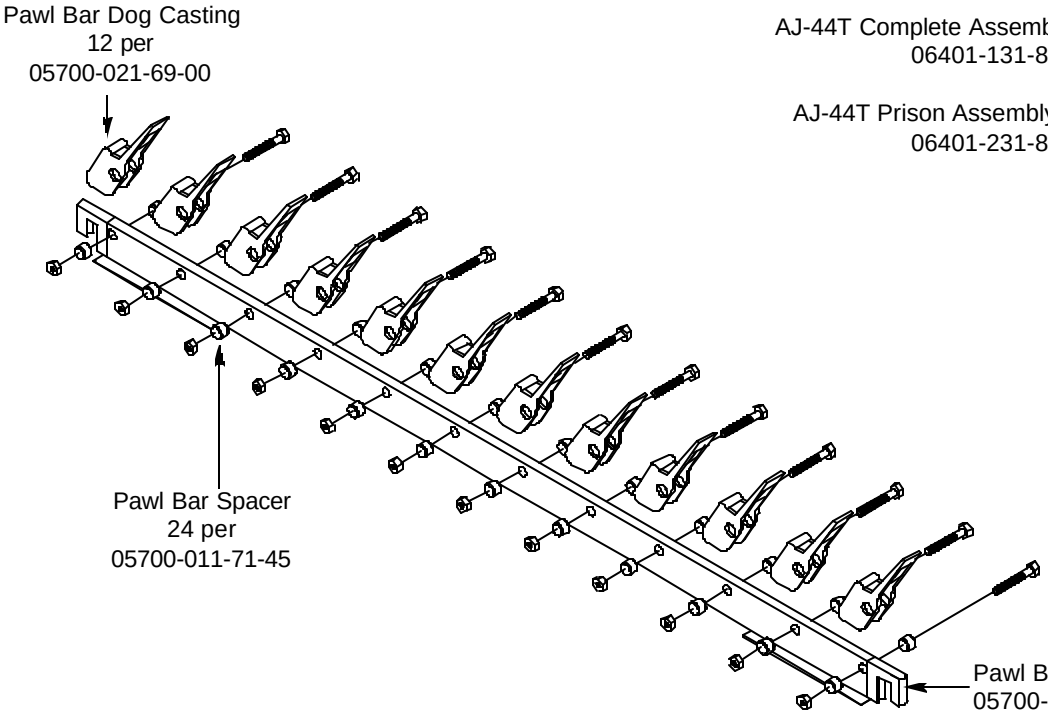
Top Guide Block

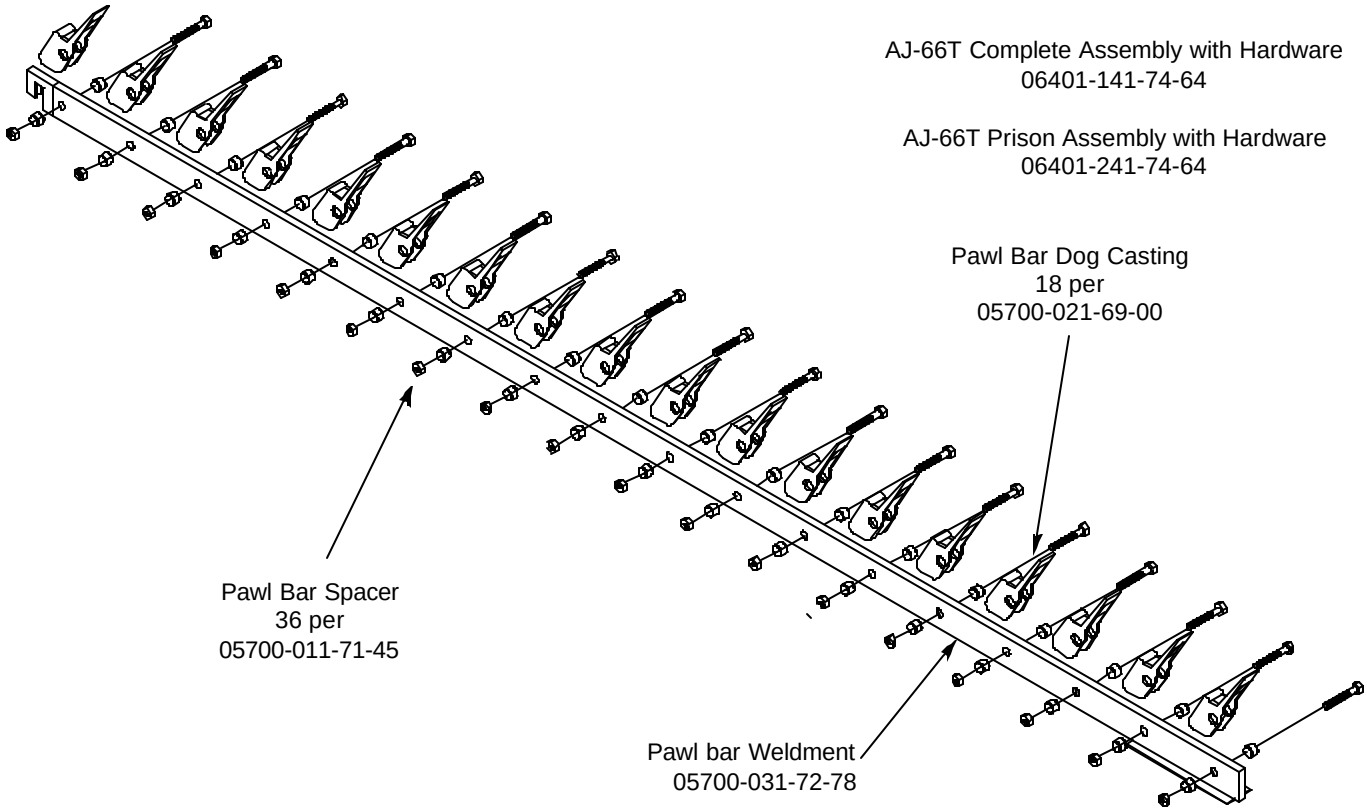
Bottom Guide Block



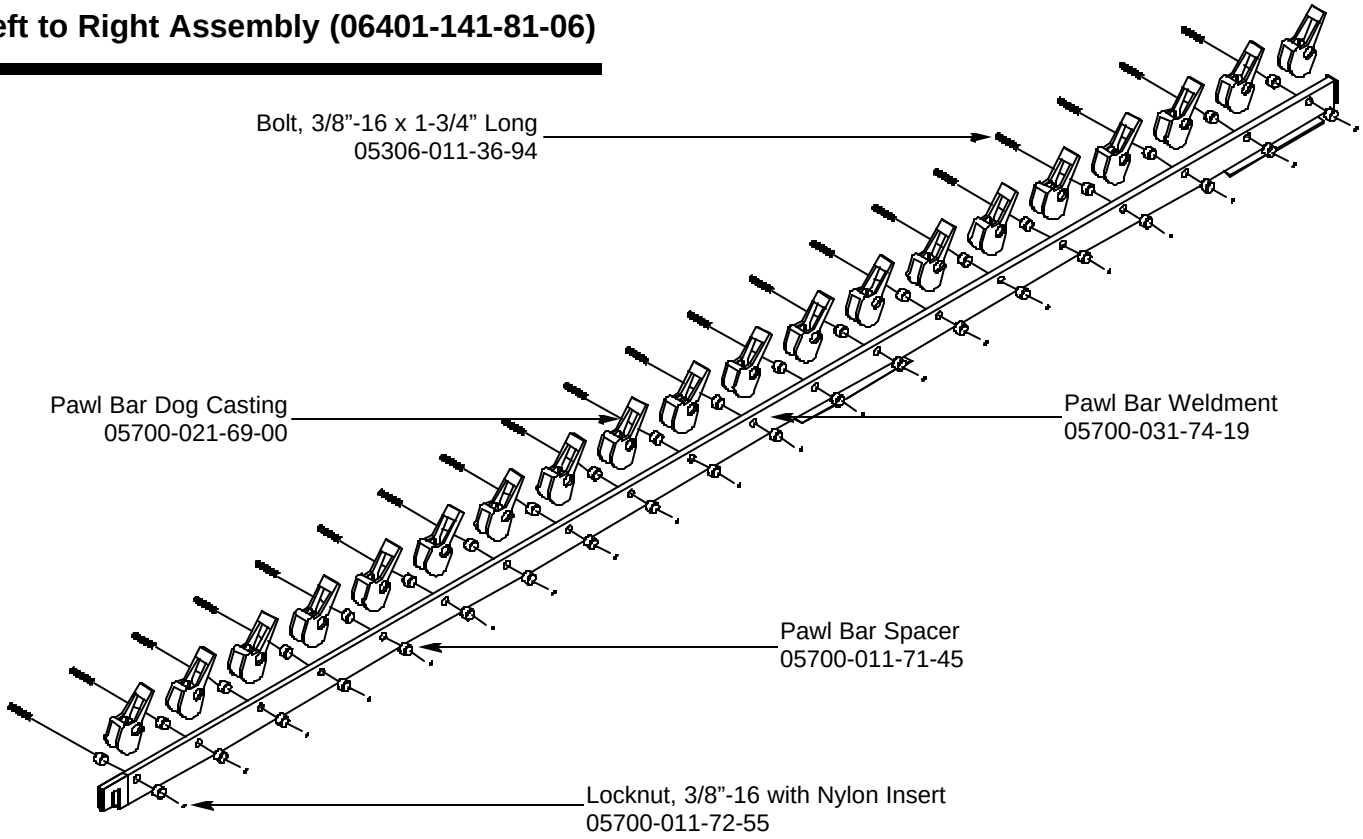
Service Note: It is highly recommended that when changing out one guide block, that the other be changed out as well, along with the gasket.

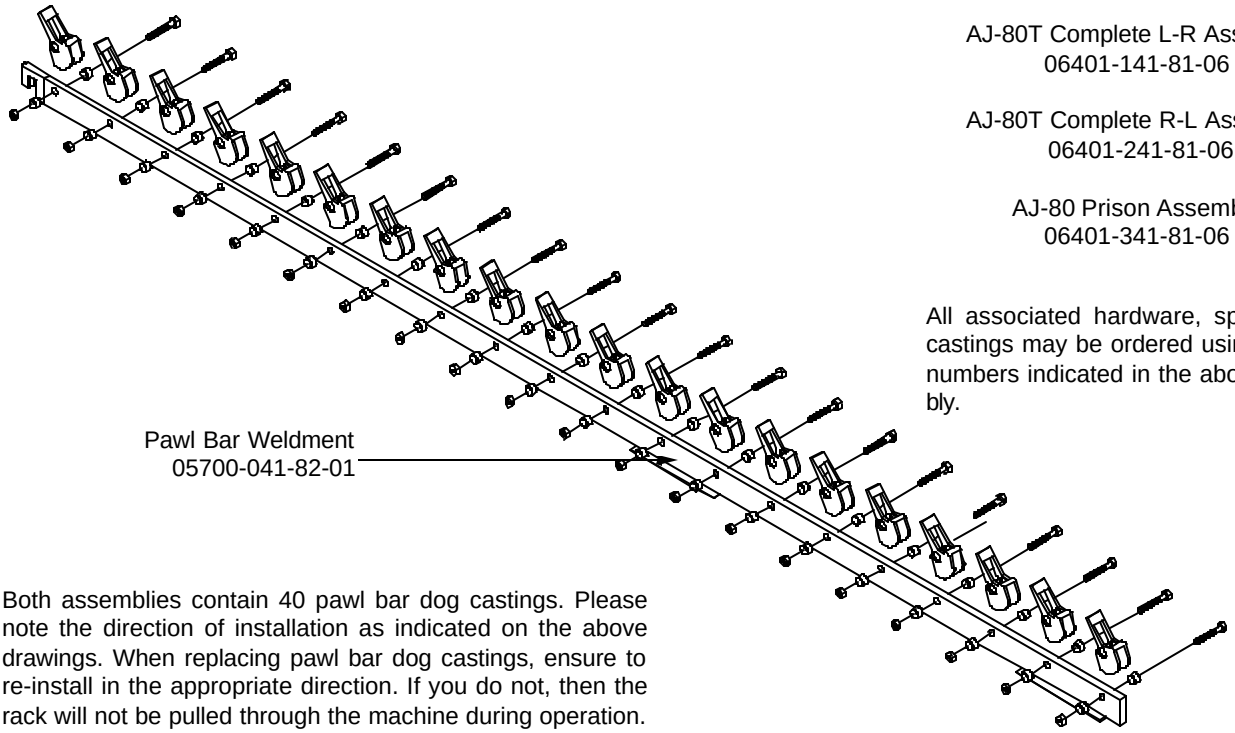
AJ-44T & AJ-66T PAWL BAR ASSEMBLIES





Left to Right Assembly (06401-141-81-06)





AJ-80T Complete L-R Assembly
06401-141-81-06

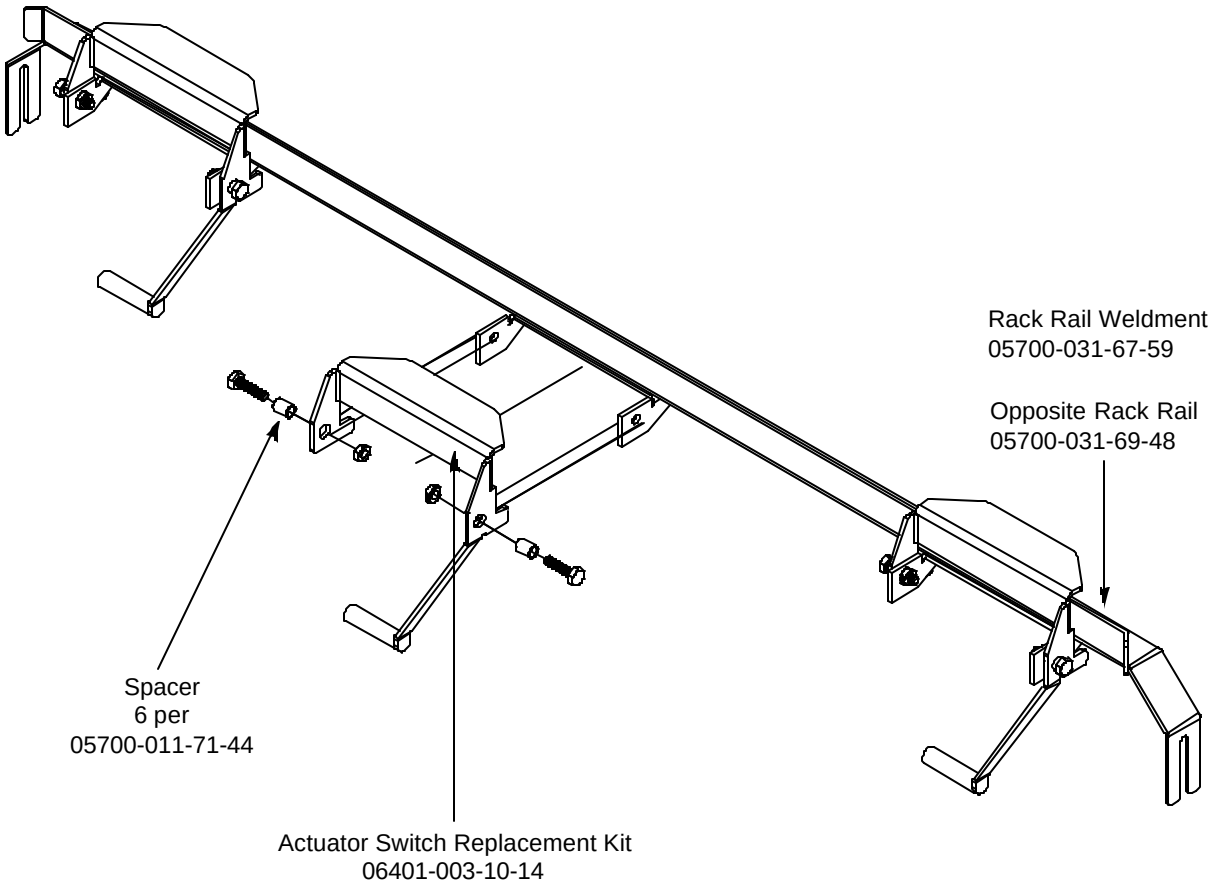
AJ-80T Complete R-L Assembly
06401-241-81-06

AJ-80 Prison Assembly
06401-341-81-06

All associated hardware, spacers and castings may be ordered using the part numbers indicated in the above assembly.

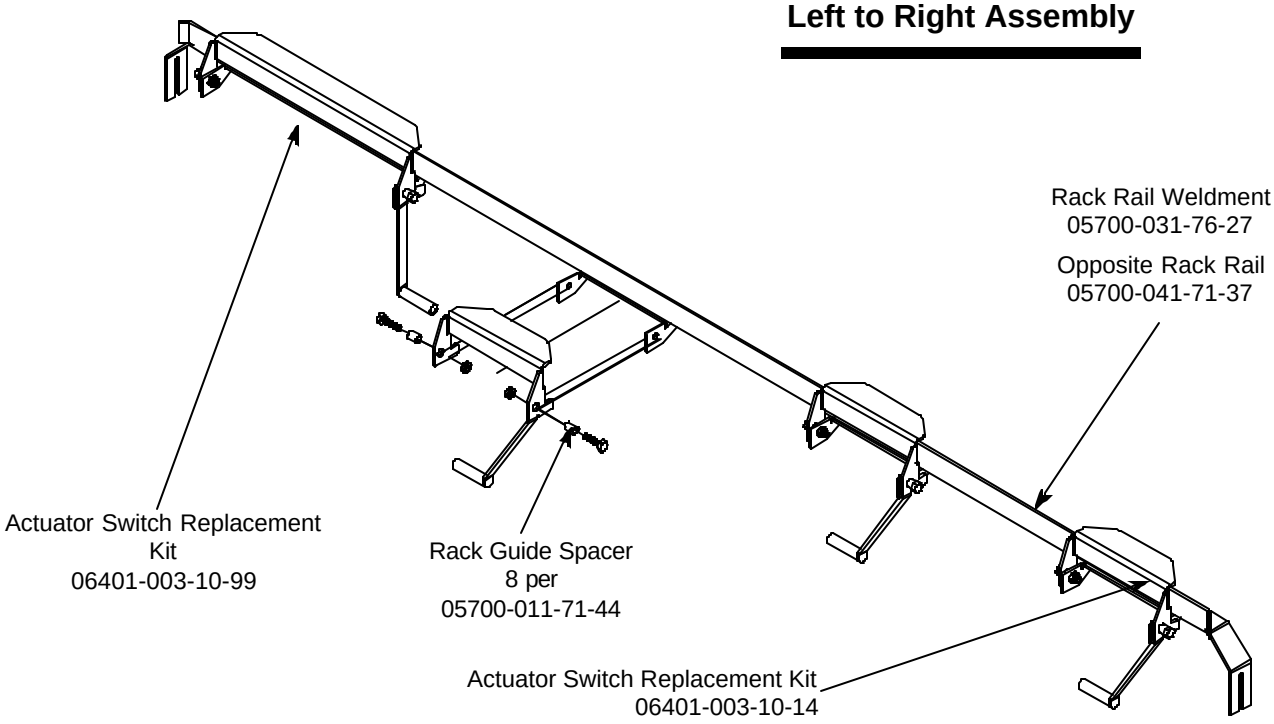
Both assemblies contain 40 pawl bar dog castings. Please note the direction of installation as indicated on the above drawings. When replacing pawl bar dog castings, ensure to re-install in the appropriate direction. If you do not, then the rack will not be pulled through the machine during operation.

AJ-44T RACK RAIL ASSEMBLY



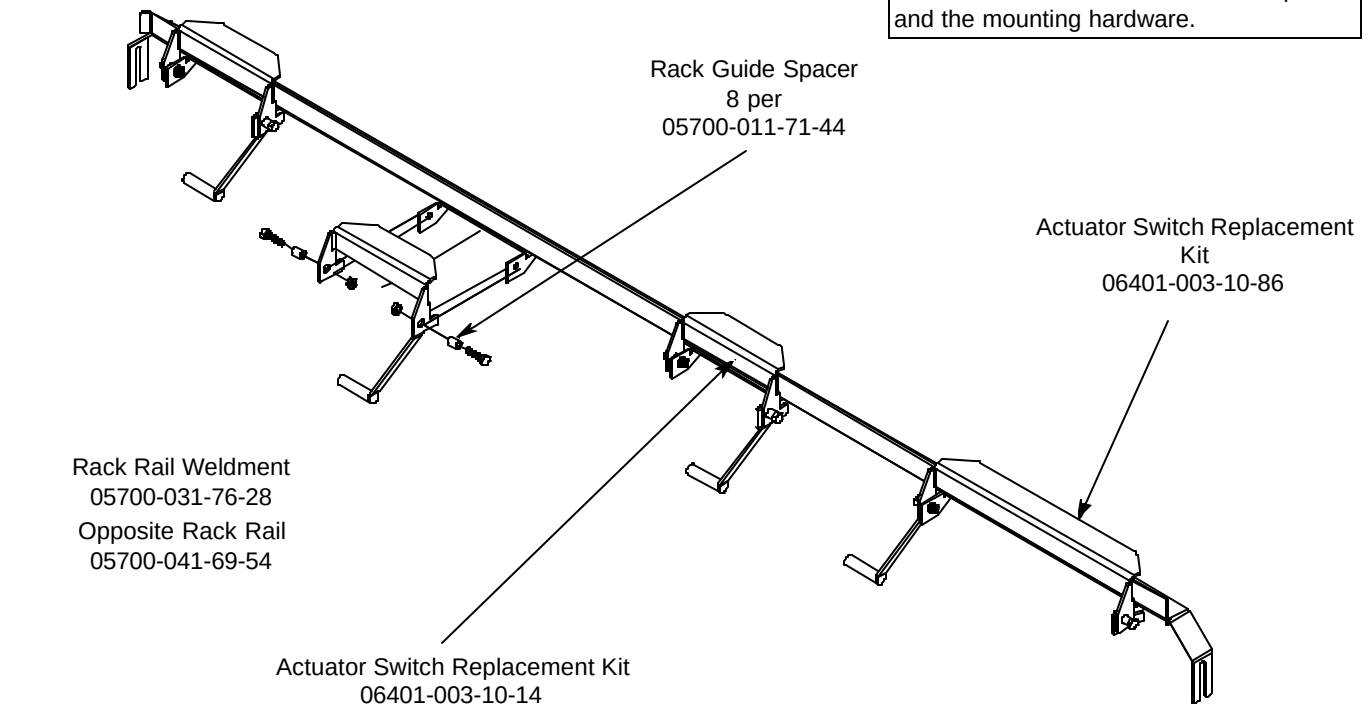
Replacement Kit Note:
The replacement kit for the actuator switch comes with the switch, two spacers and the mounting hardware.

Left to Right Assembly

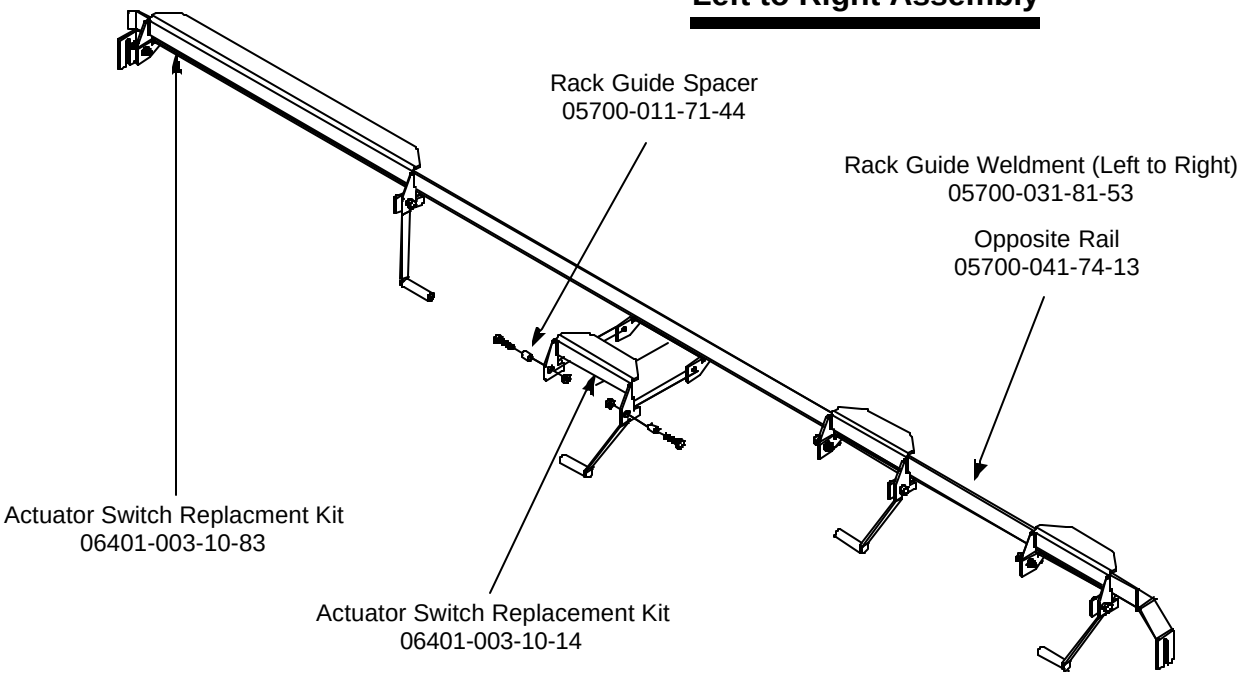


Replacement Kit Notes:
The replacement kits for the actuator switches come with the switch, two spacers and the mounting hardware.

Right to Left Assembly

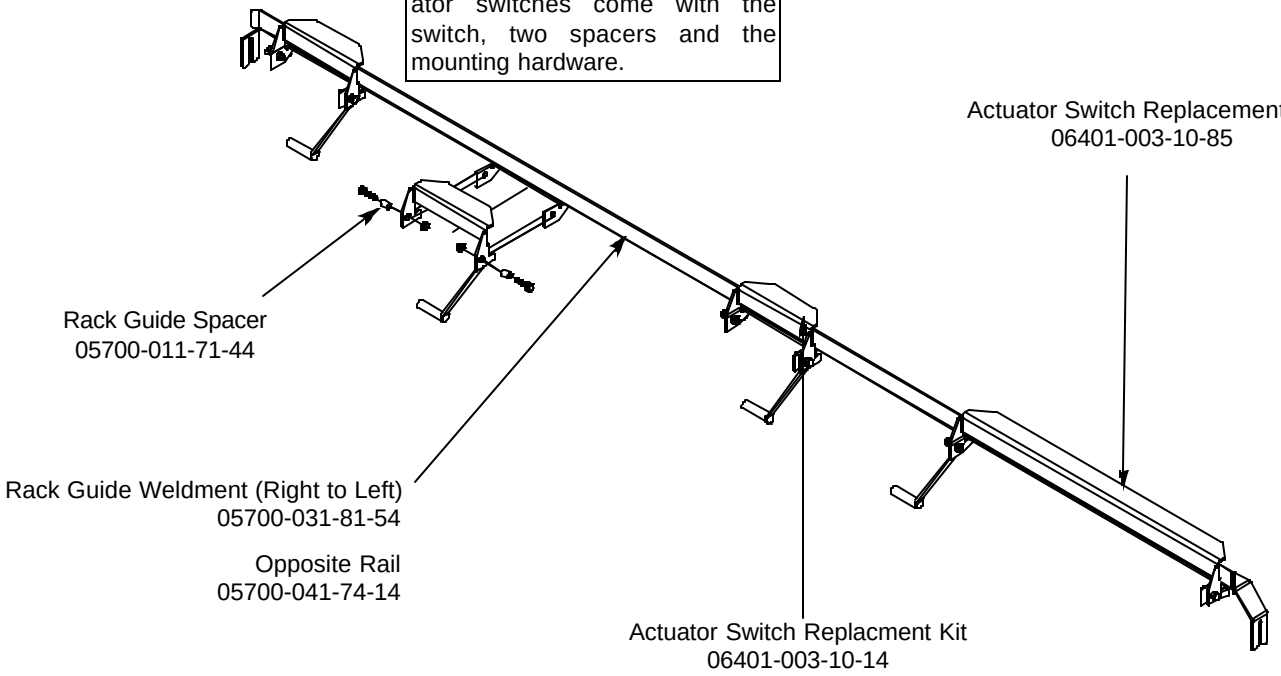


Left to Right Assembly

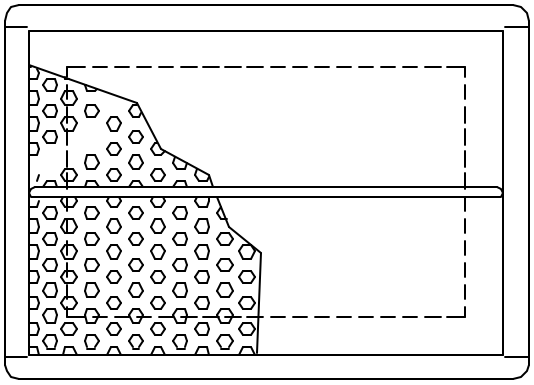


Right to Left Assembly

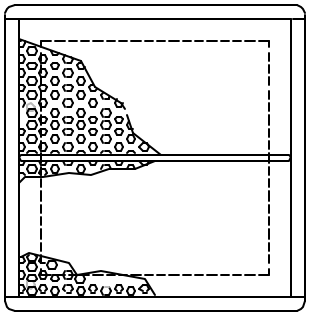
Replacement Kit Notes:
The replacement kits for the actuator switches come with the switch, two spacers and the mounting hardware.



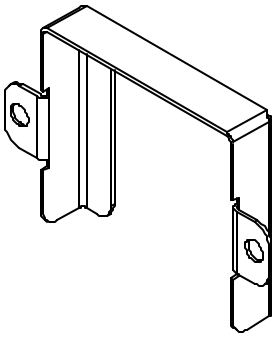
STRAINERS



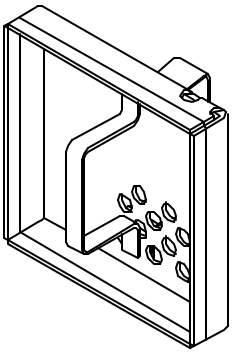
Front Strainer Weldment
05700-021-85-10



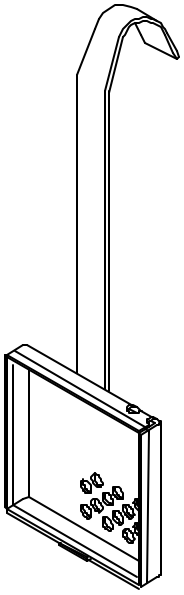
Back Strainer Weldment
05700-021-85-11



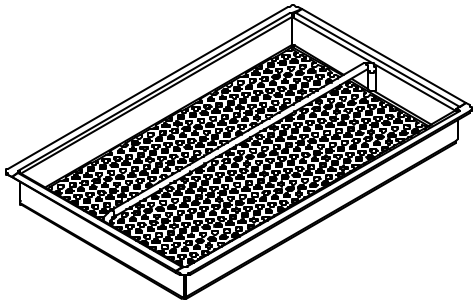
Overflow Strainer Support
05700-001-96-48



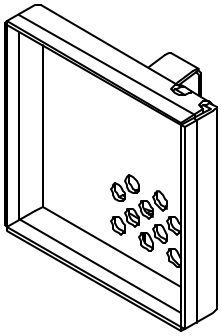
Drain Guard
Strainer Weldment
05700-002-09-15



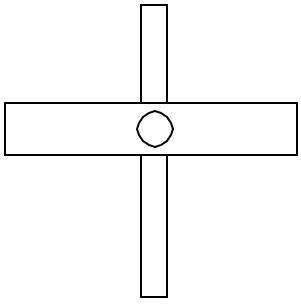
Wash Intake Strainer Weldment (TG Models)
05700-002-51-52



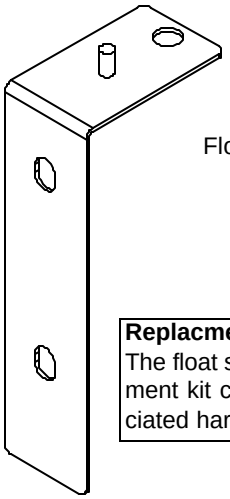
Tub Strainer Weldment (TG Models)
05700-002-03-21



Screen Strainer
with Handle Weldment
05700-002-09-04

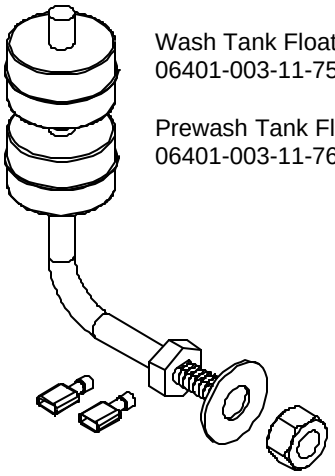


Wash Strainer Separator Weldment
05700-031-84-38



Float Switch Support Bracket
Replacement Kit
06401-003-11-77

Replacment Kit Note:
The float switch support bracket replacement kit contains the bracket and associated hardware for mounting.

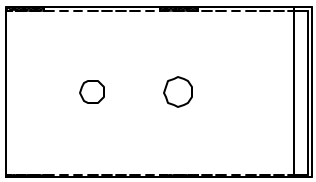


Wash Tank Float Switch Replacment Kit
06401-003-11-75

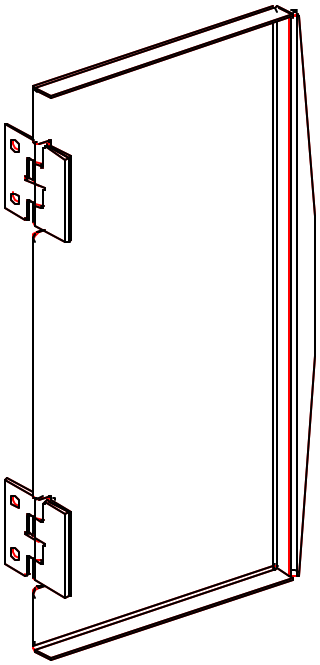
Prewash Tank Float Switch Replacment Kit
06401-003-11-76

Replacment Kit Note:
The float switch replacement kits contain the float switch with associated terminals, the flat washer and the nut.

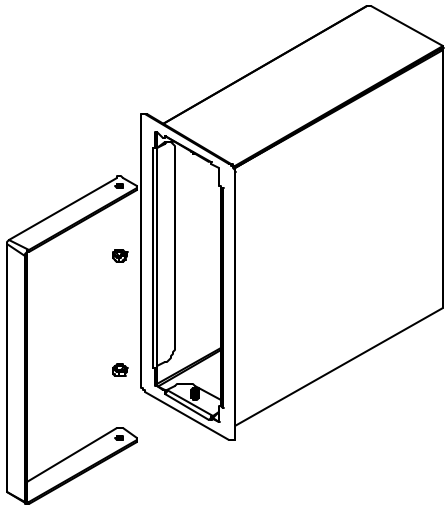
Service Agent Note:
Remember than when reinstalling the float switch that the flat washer goes inside against the tub wall while the nut is on the outside of the tub.



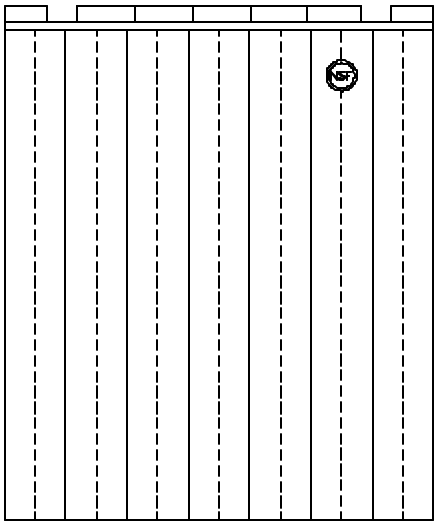
Float Switch Cover
05700-021-75-71



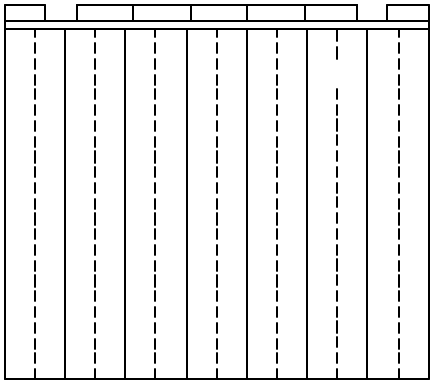
Scrap Basket Lid
Weldment
05700-002-56-55



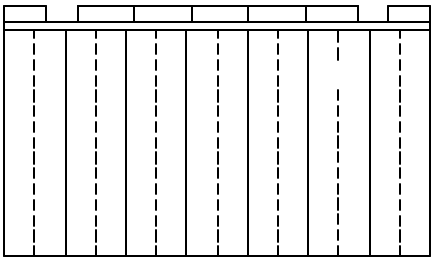
Scrap Basket Assembly
06401-002-11-21



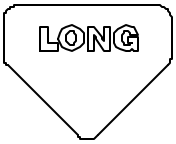
Curtain, 24 1/2” Long x 20-1/2” Wide
TG MODELS ONLY
08415-002-47-37



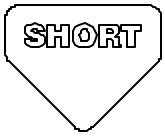
Curtain, 21” Long x 20-1/2” Wide
08415-131-73-45



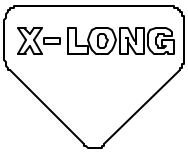
Curtain, 12” Long x 20-1/2” Wide
08415-131-73-44



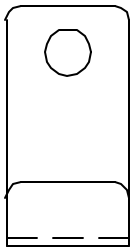
Long Curtain Decal
09905-011-73-84



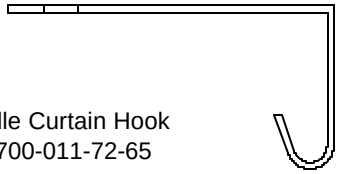
Short Curtain Decal
09905-011-73-82



Extra Long Curtain Decal
TG MODELS ONLY
09905-002-52-69

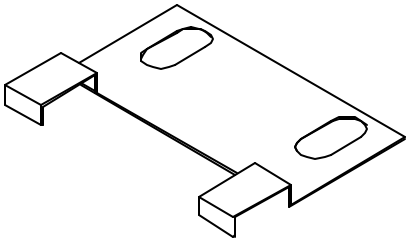


Curtain Hook
05700-011-83-54

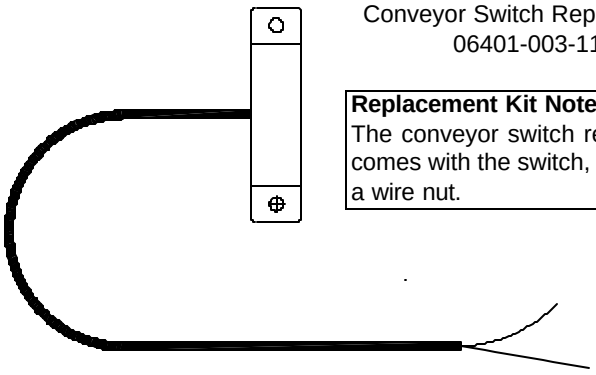


Middle Curtain Hook
05700-011-72-65

Curtain Rod
05700-021-73-43



Limit Switch Bracket
05700-021-71-18

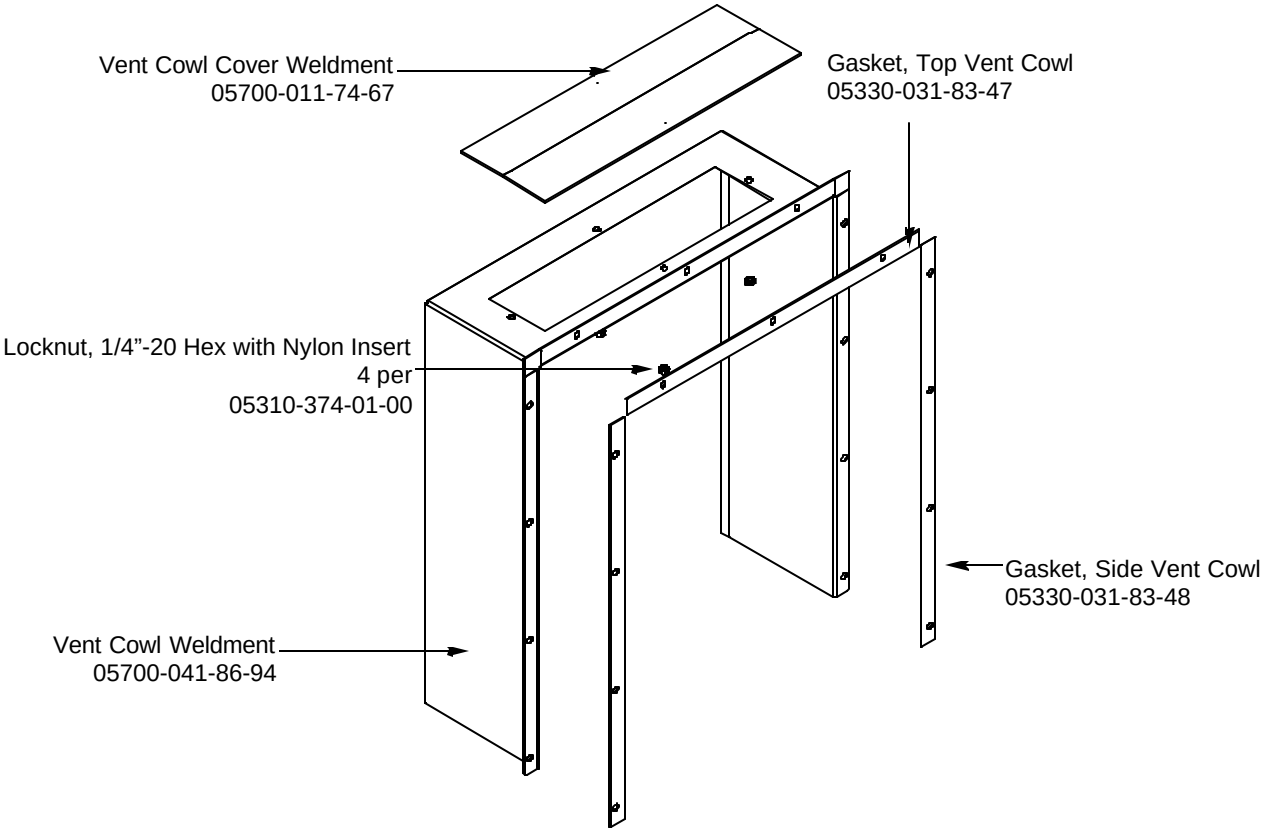


Conveyor Switch Replacement Kit
06401-003-11-79

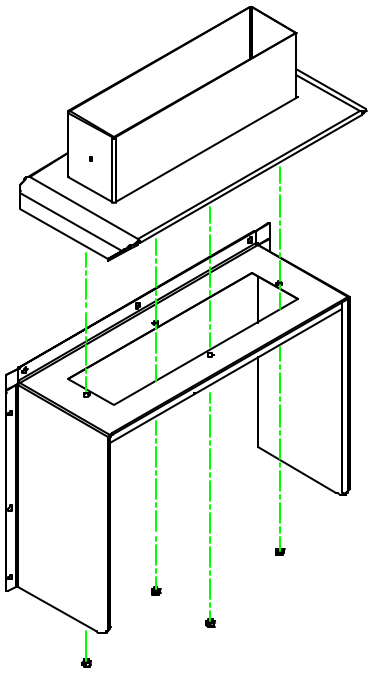
Replacement Kit Note:
The conveyor switch replacement kit comes with the switch, a terminal and a wire nut.

Service Note:
The cord for the conveyor switch needs to be cut to length in the field and have the pink terminal applied there.

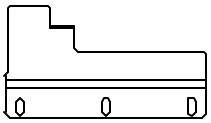
VENT COWL ASSEMBLY/VENT SCOOP OPTION



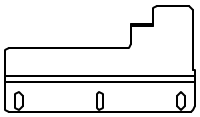
VENT SCOOP OPTION



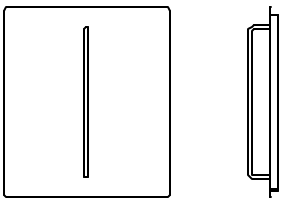
Vent Scoop Assembly
05700-002-04-08



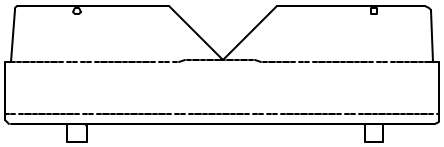
Plate, Left Water Directional
05700-021-79-27



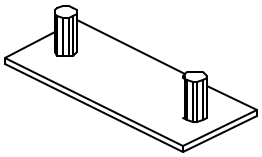
Plate, Right Water Directional
05700-021-79-23



Run Off Sheet Weldment
05700-021-71-39

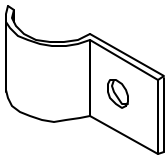


Splash Shield Weldment
05700-031-85-16

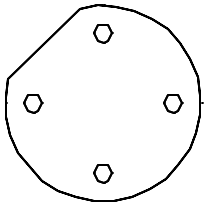


Hole Direction Plate Replacment Kit
06401-003-10-00

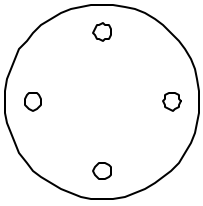
Replacment Kit Note:
The kit for the hole direction plate comes with the plate, a new gasket and the mounting hardware.



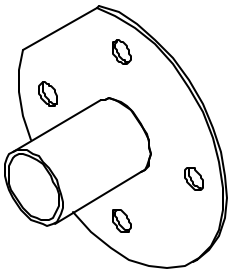
Pipe Clamp
05700-000-35-05



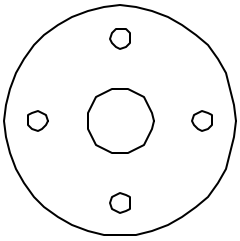
Rinse Drain Plate Replacment Kit
(TG Models Only)
06401-003-10-07



Rinse Drain Plug Replacement Kit
06401-003-10-06

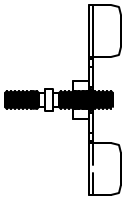


Rinse Drain Weldment Replacement Kit
06401-003-10-05

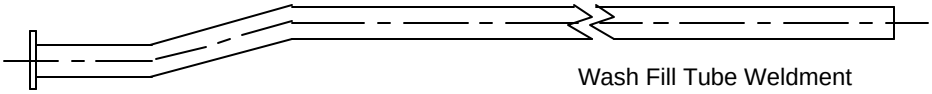


Rinse Drain Plate Gasket
05330-011-72-27

Replacement Kits Notes:
The kits for the drain weldments and drain plugs come with the weldments/parts, a new gasket and the mounting hardware.



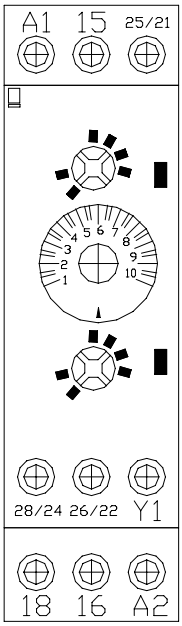
Shoulder Bolt Wingnut Weldment
05700-002-46-02



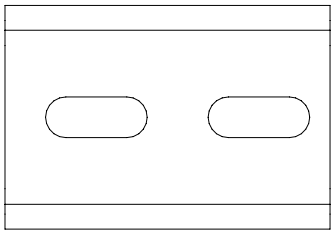
Wash Fill Tube Weldment
05700-021-71-21

Vellumoid Gasket
05330-111-42-81

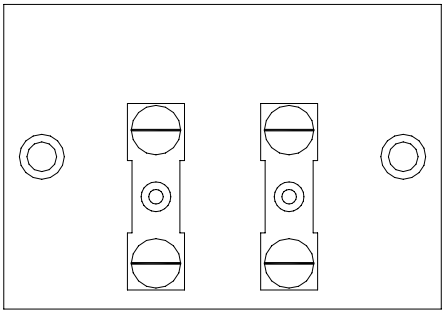
Prewash Fill Tube Weldment
(AJ-66 & AJ-80 Models Only)
05700-021-74-76



Delay Timer
05945-011-65-44



2” Din Rail
05700-002-36-09



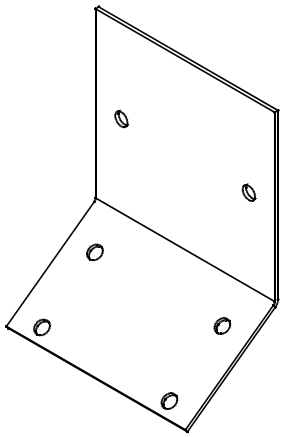
Terminal Board
05940-011-84-41

FAN LOAD ON TIMER OUTPUT
5A, 1/4HP, 240 V AC MAX

Decal, Fan Load
09905-003-32-20

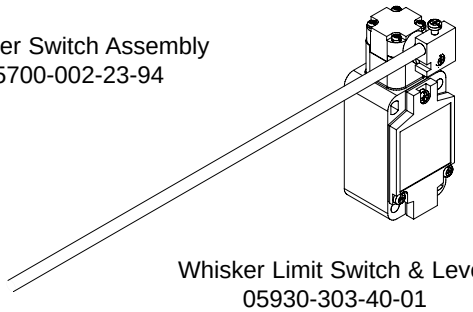
Kit, Exhaust Fan - Electric & Steam Models
05700-031-90-53

Kit, Exhaust Fan - Gas Models
05700-003-14-59



Whisker Limit Switch
Mounting Bracket
05700-000-14-55

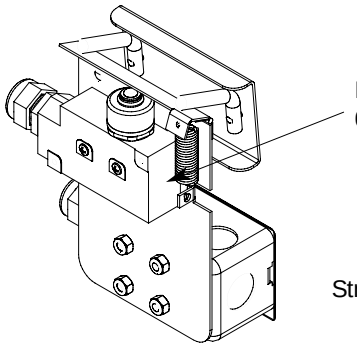
Whisker Switch Assembly
05700-002-23-94



Whisker Limit Switch & Lever
05930-303-40-01

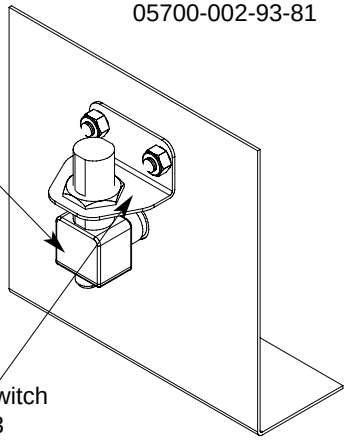
Photoelectric Limit Switch
Assembly
05700-002-93-81

Proximity Limit
Switch Sensor
06685-002-94-15



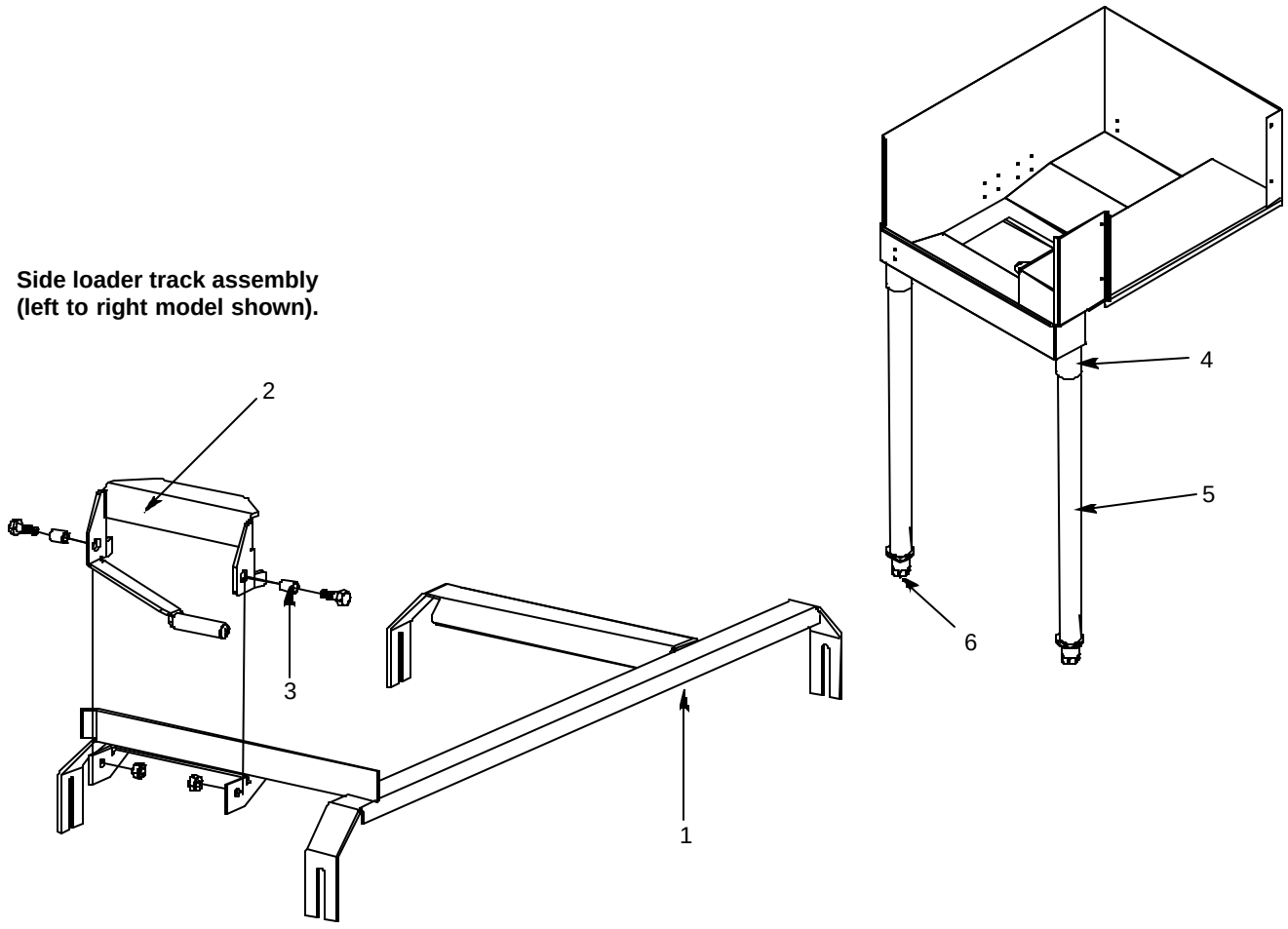
Limit Switch
05930-002-62-81

Striker Plate Limit Switch
Assembly
05700-002-62-94



Bracket, Proximity Switch
05700-002-94-93

Side loader track assembly (left to right model shown).



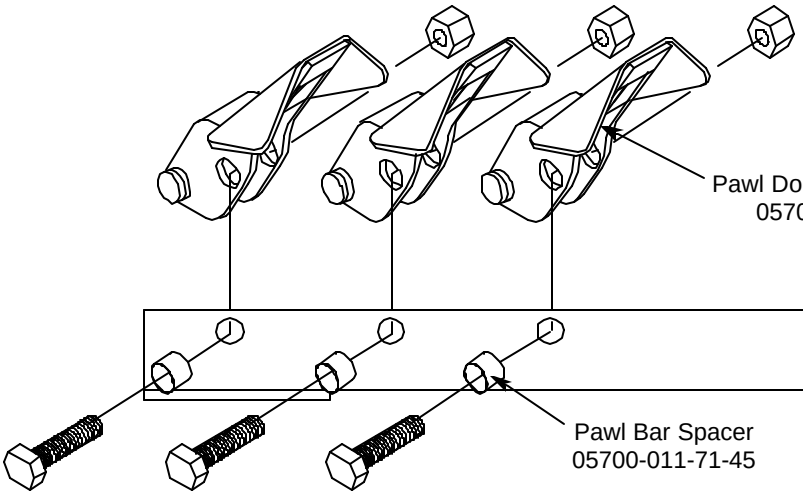
ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Track Weldment (Left to Right) 24”	05700-031-78-98
	1	Track Weldment (Right to Left) 24”	05700-031-95-20
	1	Track Weldment (Left to Right) 30”	05700-003-04-57
	1	Track Weldment (Right to Left) 30”	05700-003-04-58
2	1	Actuator Switch Replacement Kit	06401-003-10-64
3	2	Spacer	05700-011-71-44
4	1	Leg Socket Replacement Kit	06401-003-09-79
5	1	Leg Support Replacement Kit	06401-003-09-80
6	1	Bullet Foot	05340-108-01-03

Replacement Kits Notes:

The actuator switch replacement kit comes with the actuator weldment, mounting hardware and (2) spacers.

The leg socket replacement kit has the leg socket, mounting hardware and set screw.

The leg support replacement kit has the leg and the bullet foot included.

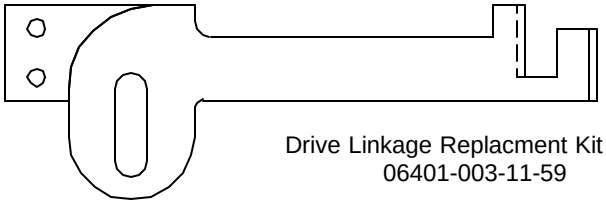


Replacement Kit Note:
The kits for the pawl bars come with the bar weldment, (3) dogs and the hardware.

Pawl Dog Wing Weldment
05700-021-86-79

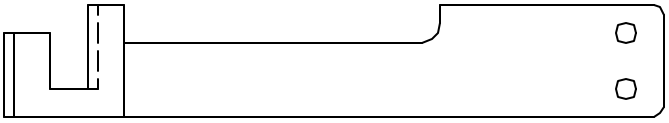
Pawl Bar Spacer
05700-011-71-45

Kit, Pawl Bar Replacement: 06401-131-86-90
Kit, 30" Pawl Bar Replacement: 06401-231-86-90

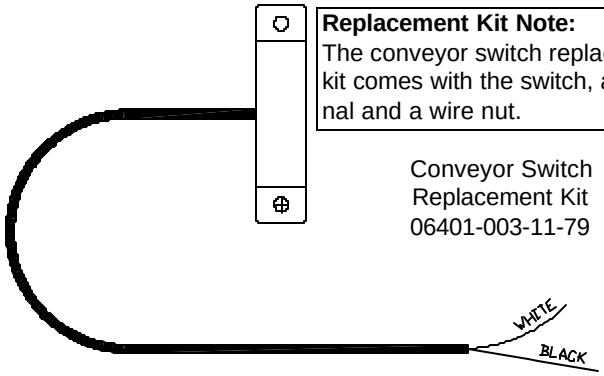


Drive Linkage Replacment Kit (L-R)
06401-003-11-59

Replacement Kit Note:
The replacement kits for the drive linkages come also with the hardware for mounting them to the pawl bars.



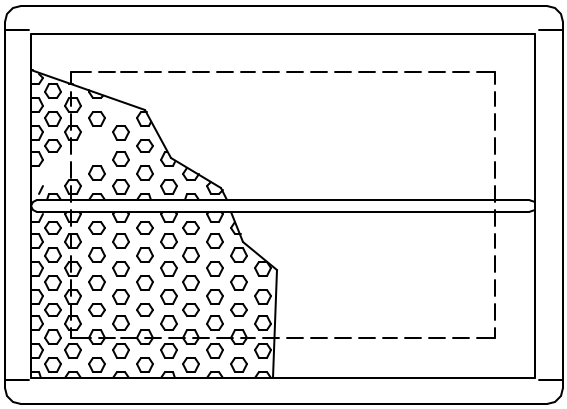
Drive Linkage Replacement (R-L)
06401-003-11-60



Replacement Kit Note:
The conveyor switch replacement kit comes with the switch, a terminal and a wire nut.

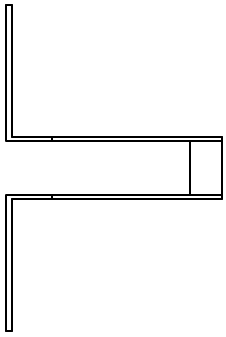
Conveyor Switch
Replacement Kit
06401-003-11-79

Service Note:
The cord for the conveyor switch needs to be cut to length in the field and have the pink terminal applied there.

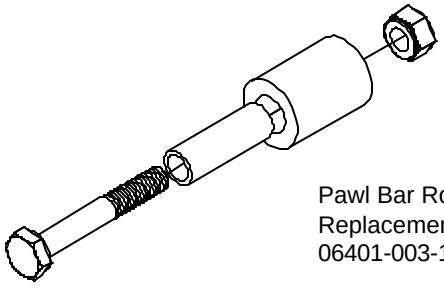


Front Strainer Weldment
05700-021-85-10

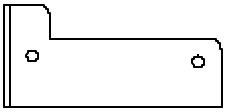
SIDE LOADER PAWL BAR ASSOCIATED PARTS

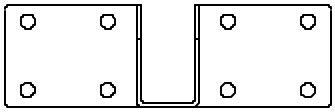


Pawl Bar Roller Bracket
05700-031-77-94



Pawl Bar Roller
Replacement Kit
06401-003-11-80

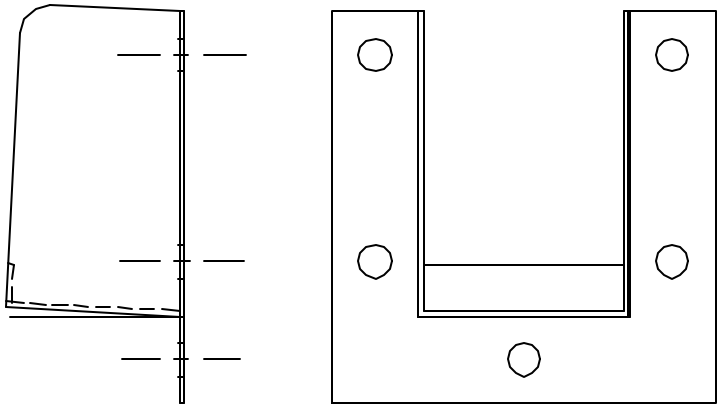




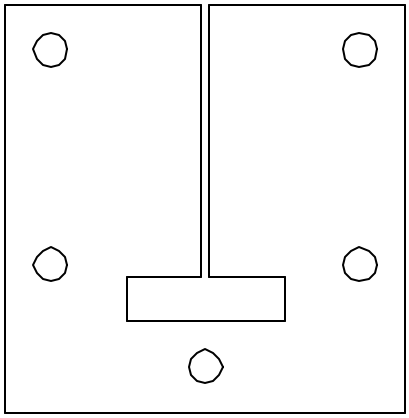
Replacement Kit Notes:
The replacement kit for the pawl bar roller comes with the roller, roller shaft, hardware and locknut as shown.

Associated Hardware:

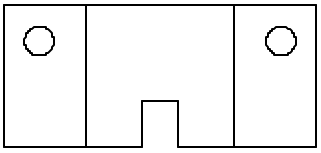
Washer, 1/4”-20 I.D.	05311-174-01-00
Locknut, 1/4”-20 S.S. Hex w/Nylon Insert	05310-374-01-00



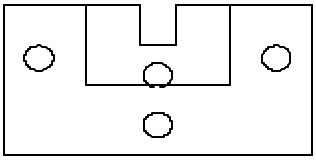
Pawl Bar Gutter Weldment Replacement Kit
06401-003-09-95



Drive Gutter Gasket
05330-011-68-55



Top Guide Block



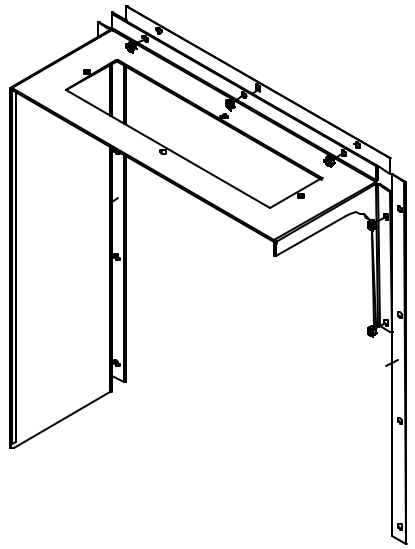
Bottom Guide Block

Guide Block Replacment Kit
06401-003-10-15

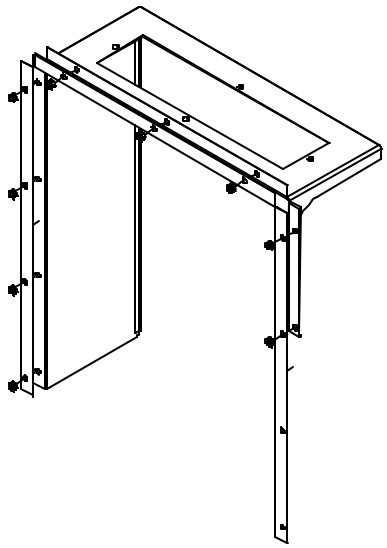
Replacement Kit Notes:
The pawl bar gutter kit includes the weldment, locknuts and the gasket. The guide block kits includes the blocks and the gasket.

Service Note:
Because of wear patterns that develop over time, it is highly recommended that when replacing either of the guide blocks, that the other be replaced as well from the kit.

Vent Cowl Replacement Kit (Left to Right)
06401-003-11-81



Vent Cowl Replacement Kit (Right to Left)
06401-003-11-83



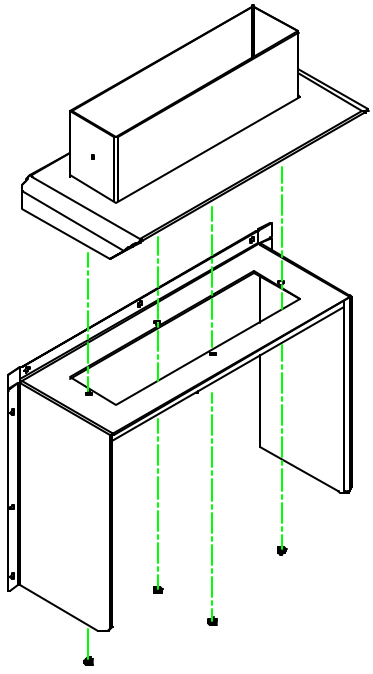
Service Note:
One of the side gaskets that come in the kit will need to be cut to length in order to fit properly on the unit when replaced.

Replacement Kit Note:
The replacement kit(s) for the vent cowls come with the cowls, the gaskets and mounting hardware.

Vent Cowl Gasket, Top: 05330-031-83-47
Vent Cowl Gasket, Side: 05330-031-83-48

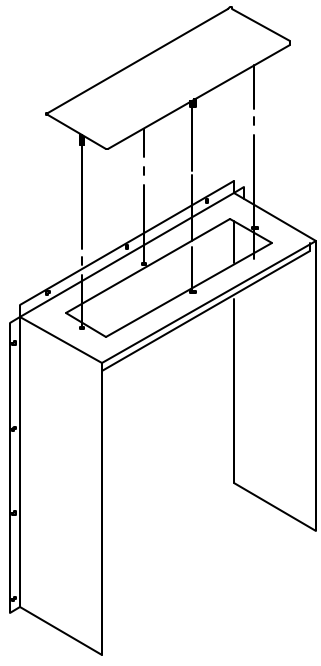
VENT SCOOP OPTION

Vent Scoop Assembly
05700-002-04-08



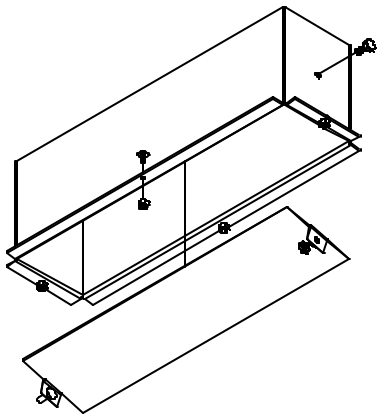
STANDARD ASSEMBLY

Vent Cowl Cover Replacement Kit
06401-003-10-16



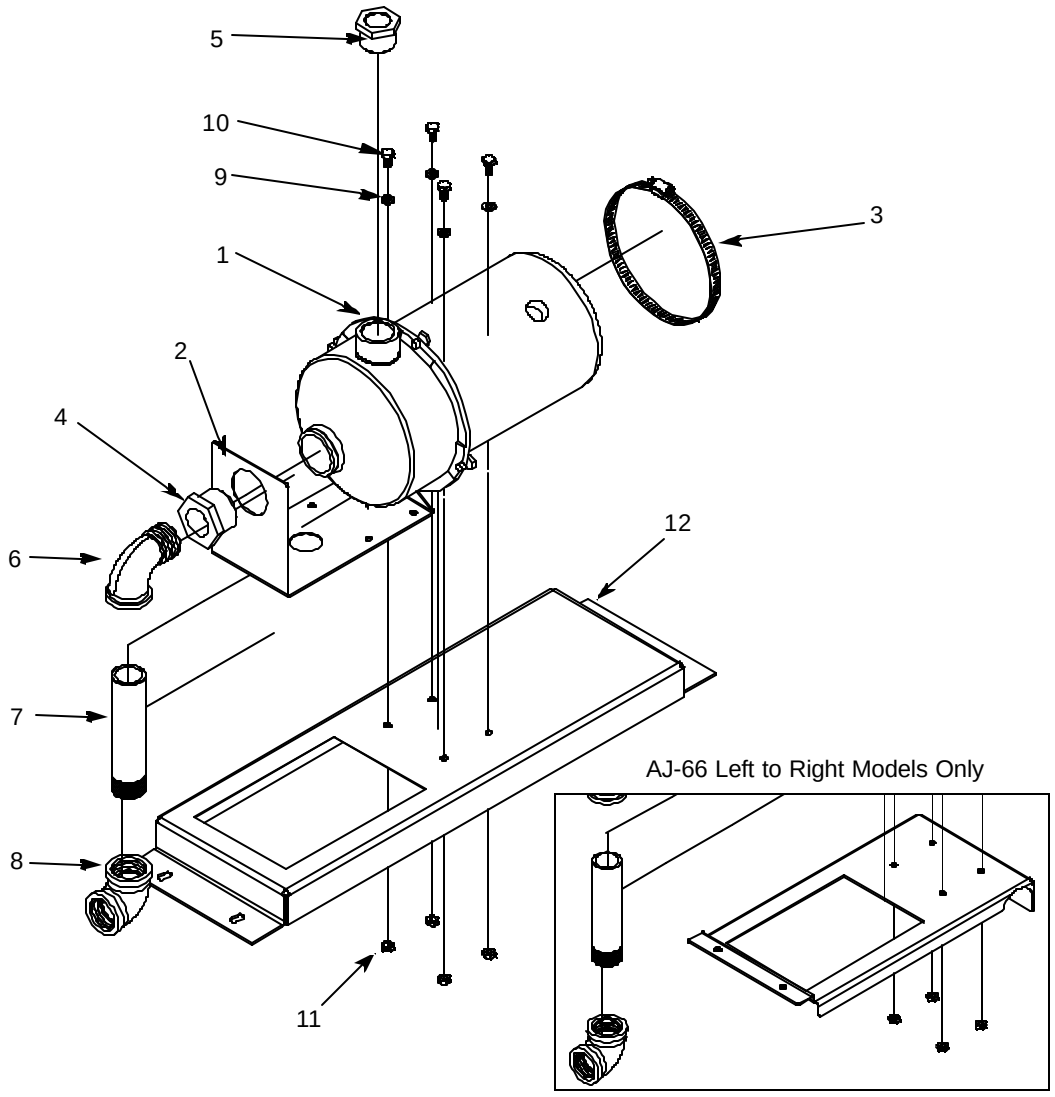
Replacement Kit Note:
The cover kit contains the cover and the hardware for mounting it.

VENT COWL ASSEMBLY FOR
HOODED SIDE LOADER OPTION
05700-003-05-66



SECTION 6: PARTS SECTION

RINSE FILL OPTION

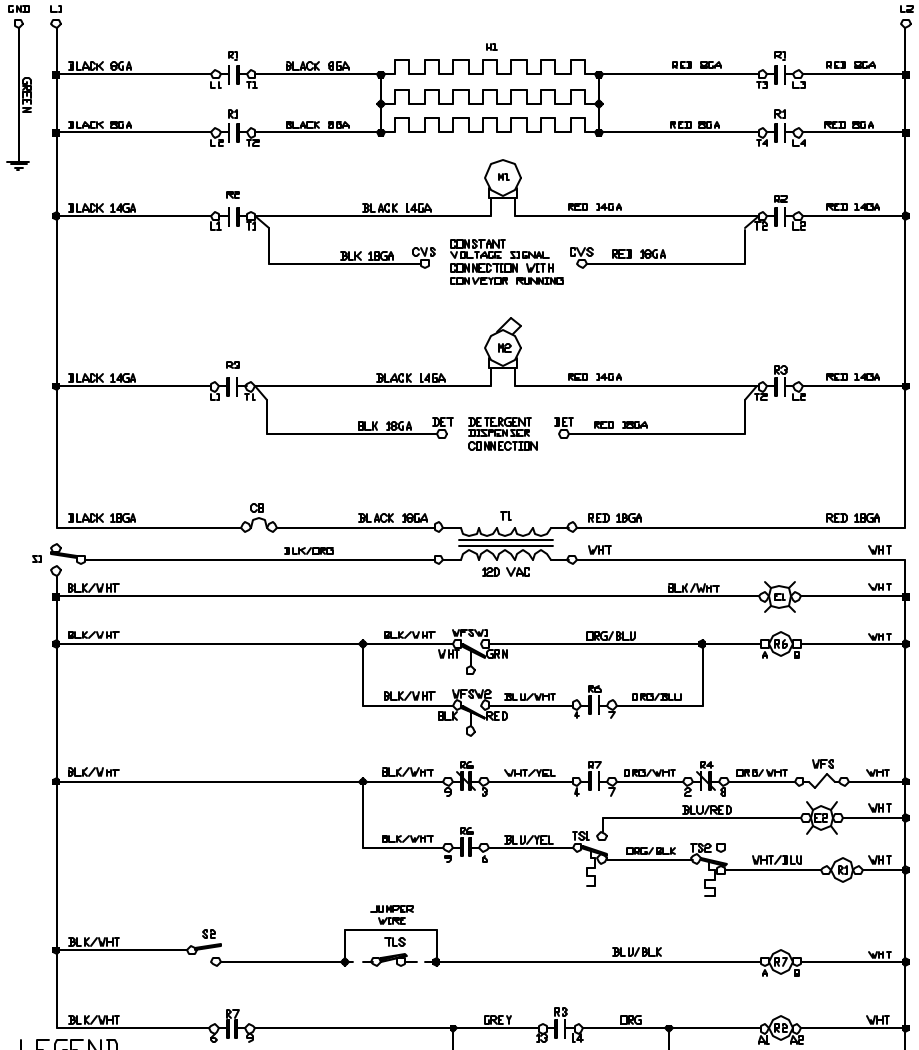


ITEM	QTY	DESCRIPTION	Mfg. No.
	1	Rinse Fill Motor Assembly	05700-002-40-25
	1	Rinse Fill Motor Assembly (AJ-66 Left to Right Models Only)	05700-002-48-22
1	1	Motor	06105-002-72-71
2	1	Bracket, Pump Mounting	05700-002-63-59
3	1	Clamp, Hose 5 5/8” to 6”	04730-011-34-90
4	1	Reducer Bushing, 1 1/4” to 1”	04730-002-73-62
5	1	Reducer Bushing 1” to 3/4”	04730-011-65-14
6	1	Elbow, 90 Deg., 1” Street	04730-002-11-99
7	1	Nipple, 1” NPT x 6” Long Brass	04730-002-12-00
8	1	Elbow, 90 Deg. Brass Female	04730-002-12-55
9	4	Lockwasher, 1/4”	05311-274-01-00
10	4	Bolt, 1/4”-20 x 1/2” Long	05305-274-02-00
11	4	Nut, Hex S/S 1/4”-20	05310-274-01-00
12	1	Rinse Motor Mounting Bracket	05700-002-38-90
12	1	Rinse Motor Mounting Bracket (AJ-66 Left to Right Models Only)	05700-002-39-33

SECTION 7:
ELECTRICAL SCHEMATICS

SECTION 7: ELECTRICAL SCHEMATICS

AJ-44TE (208-230 VOLT/60 HZ/1 PHASE)



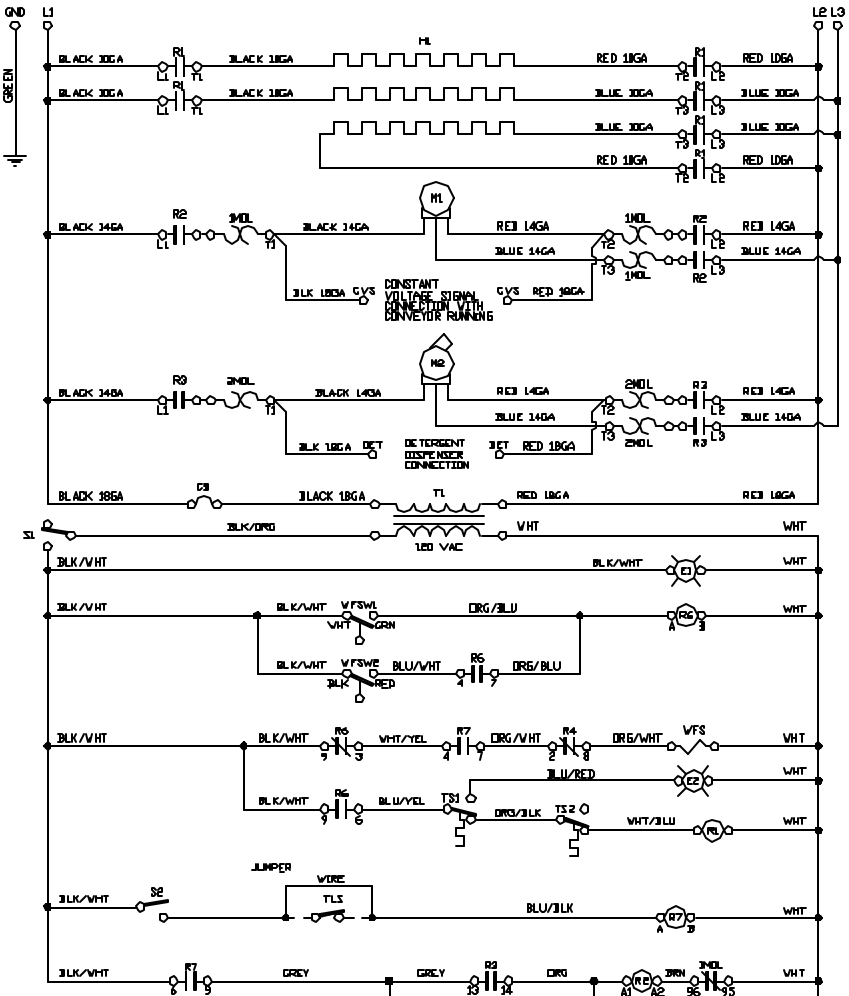
LEGEND

L1 L2	POWER DISTRIBUTION BLOCK
GND	GROUND
R1	HEAT CONTACTOR
R2	DRIVE MOTOR CONTACTOR
R3	WASH PUMP MOTOR CONTACTOR
R4	FINAL RINSE RELAY
R6	WASH TANK FILL RELAY
R7	DOOR SAFETY SWITCH RELAY
H1	WASH HEATER
M1	DRIVE MOTOR
M2	WASH PUMP MOTOR
CB	CONTROL CIRCUIT BREAKER
T1	CONTROL TRANSFORMER
DET	DETERGENT DISPENSER CONNECTION
CVS	CONSTANT VOLTAGE SIGNAL
S1	POWER SWITCH
S2	DOOR SAFETY SWITCH
S3	WASH PUMP SWITCH 1
S4	WASH PUMP SWITCH 2
S5	AUTO - MAN./DELIME SWITCH
S6	FINAL RINSE SWITCH
E1	POWER LIGHT
E2	HEATER HIGH LIMIT LIGHT
WFSW1	WASH FLOAT SWITCH 1
WFSW2	WASH FLOAT SWITCH 2
TS1	HEATER HIGH LIMIT THERMOSTAT
TS2	WASH REGULATING THERMOSTAT
TLS	TABLE LIMIT SWITCH (OPTIONAL)
WFS	WASH FILL SOLENOID
RS	FINAL RINSE SOLENOID

9905-D31-72-94c

SECTION 7: ELECTRICAL SCHEMATICS

AJ-44TE (208-230 VOLT/60 HZ/3 PHASE)



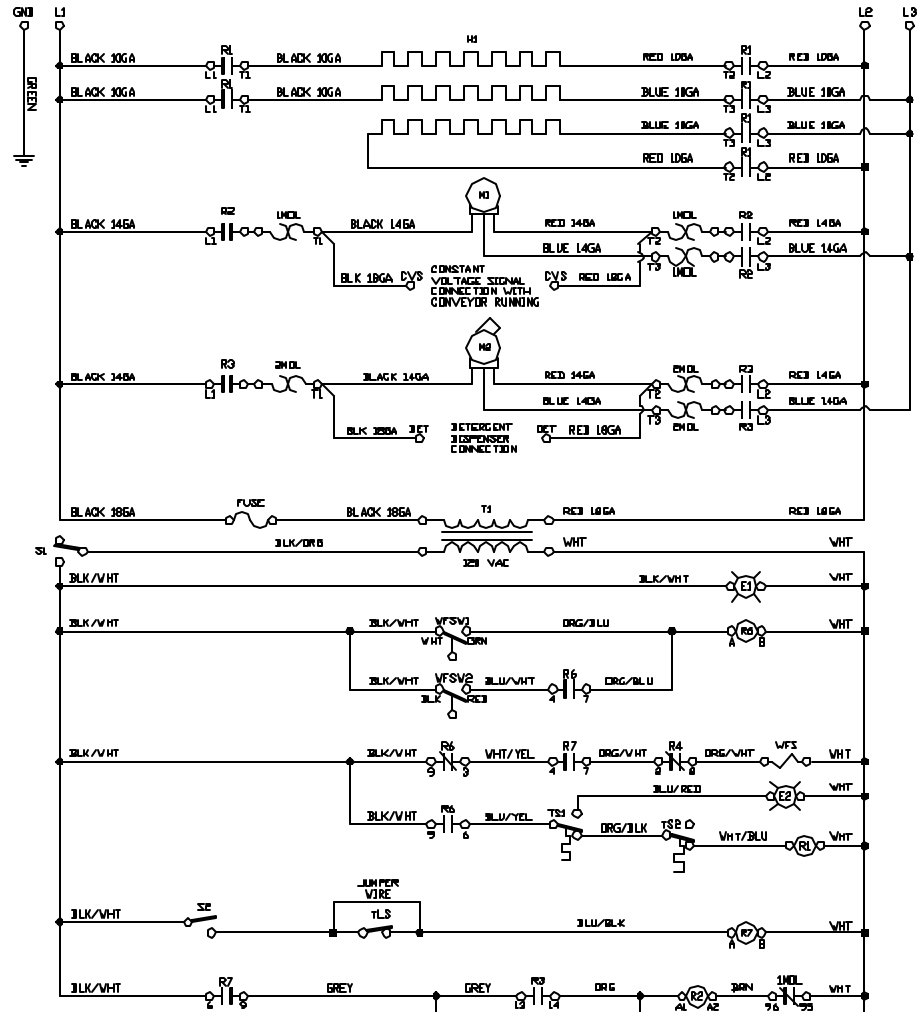
LEGEND

L1 L2 L3	POWER DISTRIBUTION BLOCK
GND	GROUND
R1	HEAT CONTACTOR
R2	DRIVE MOTOR CONTACTOR
R3	WASH PUMP MOTOR CONTACTOR
R4	FINAL RINSE RELAY
R6	WASH TANK FILL RELAY
R7	DOOR SAFETY SWITCH RELAY
H1	WASH HEATER
M1	DRIVE MOTOR
M2	WASH PUMP MOTOR
1MOL	DRIVE MOTOR OVERLOAD
2MOL	WASH PUMP MOTOR OVERLOAD
CB	CONTROL CIRCUIT BREAKER
T1	CONTROL TRANSFORMER
DET	DETERGENT DISPENSER CONN.
CVS	CONSTANT VOLTAGE SIGNAL
S1	POWER SWITCH
S2	DOOR SAFETY SWITCH
S3	WASH PUMP SWITCH 1
S4	WASH PUMP SWITCH 2
S5	AUTO - MAN/DELIME SWITCH
S6	FINAL RINSE SWITCH
E1	POWER LIGHT
E2	HEATER HIGH LIMIT LIGHT
WFSW1	WASH FLOAT SWITCH 1
WFSW2	WASH FLOAT SWITCH 2
TS1	HEATER HIGH LIMIT THERMOSTAT
TS2	WASH REGULATING THERMOSTAT
TLS	TABLE LIMIT SWITCH (OPTIONAL)
WFS	WASH FILL SOLENOID
RS	FINAL RINSE SOLENOID

9905-031-70-79

SECTION 7: ELECTRICAL SCHEMATICS

AJ-44TE (460 VOLT/60 HZ/3 PHASE)



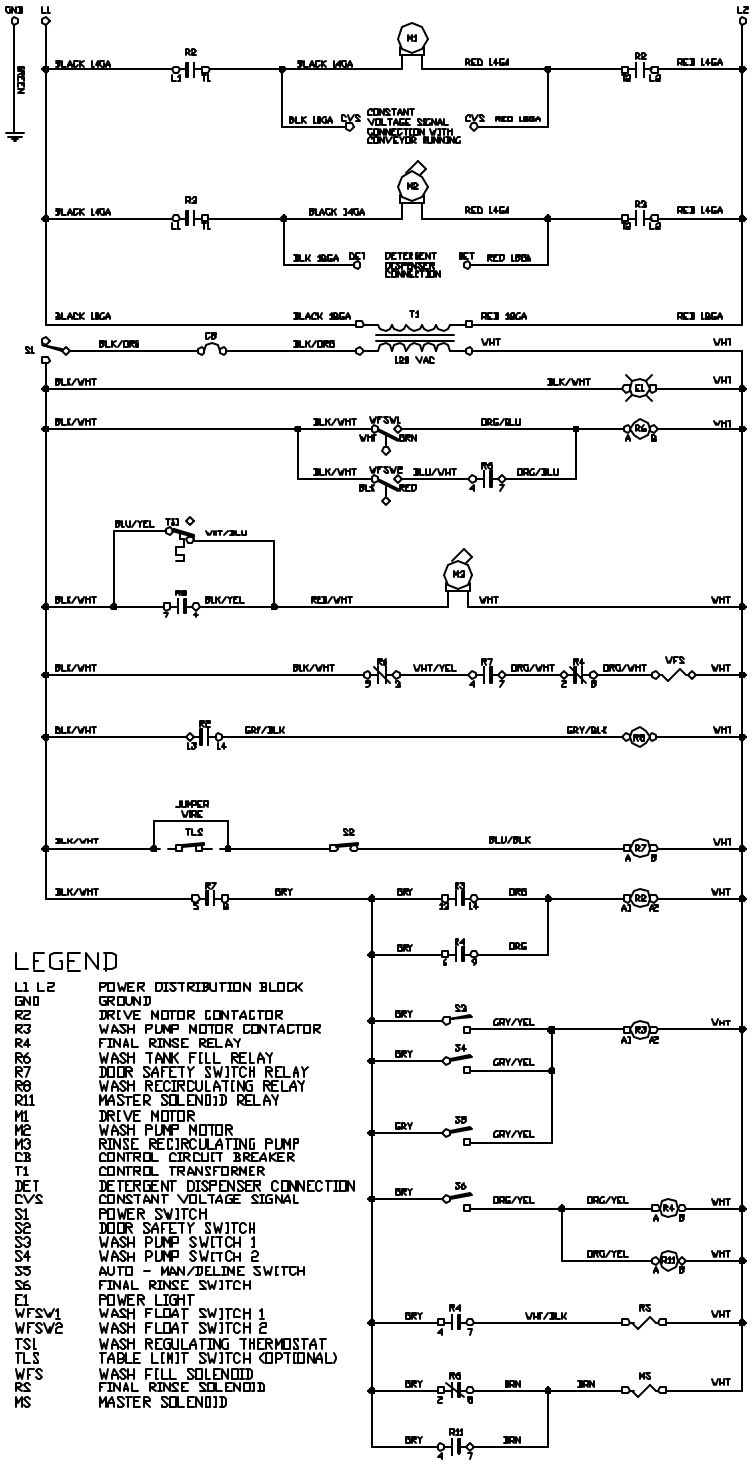
LEGEND

L1 L2 L3	POWER DISTRIBUTION BLOCK
GND	GROUND
R1	HEAT CONTACTOR
R2	DRIVE MOTOR CONTACTOR
R3	WASH PUMP MOTOR CONTACTOR
R4	FINAL RINSE RELAY
R6	WASH TANK FILL RELAY
R7	DOOR SAFETY SWITCH RELAY
H1	WASH HEATER
M1	DRIVE MOTOR
M2	WASH PUMP MOTOR
1MOL	DRIVE MOTOR OVERLOAD
2MOL	WASH PUMP MOTOR OVERLOAD
FUSE	CONTROL CIRCUIT TRANSFORMER FUSE
T1	CONTROL TRANSFORMER
IDET	DETERGENT DISPENSER CONNECTION
CVS	CONSTANT VOLTAGE SIGNAL
S1	POWER SWITCH
S2	DOOR SAFETY SWITCH
S3	WASH PUMP SWITCH 1
S4	WASH PUMP SWITCH 2
S5	AUTO - MAN/DELIME SWITCH
S6	FINAL RINSE SWITCH
E1	POWER LIGHT
E2	HEATER HIGH LIMIT LIGHT
VFSV1	WASH FLOAT SWITCH 1
VFSV2	WASH FLOAT SWITCH 2
TS1	HEATER HIGH LIMIT THERMOSTAT
TS2	WASH REGULATING THERMOSTAT
TLS	TABLE LIMIT SWITCH (OPTIONAL)
WFS	WASH FILL SOLENOID
RS	FINAL RINSE SOLENOID

9905-031-7E-90

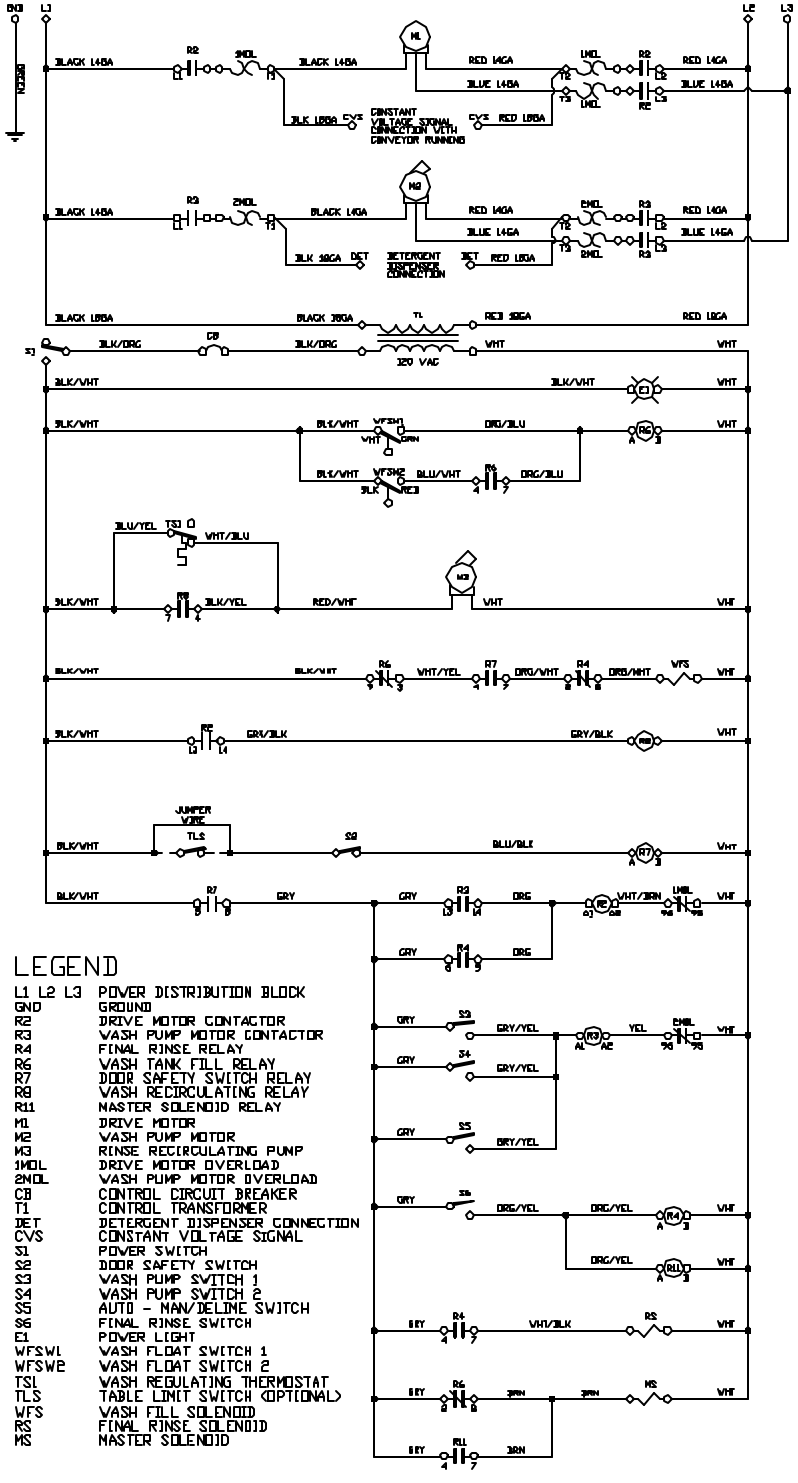
SECTION 7: ELECTRICAL SCHEMATICS

AJ-44TG (208-230 VOLT/60 HZ/1 PHASE)



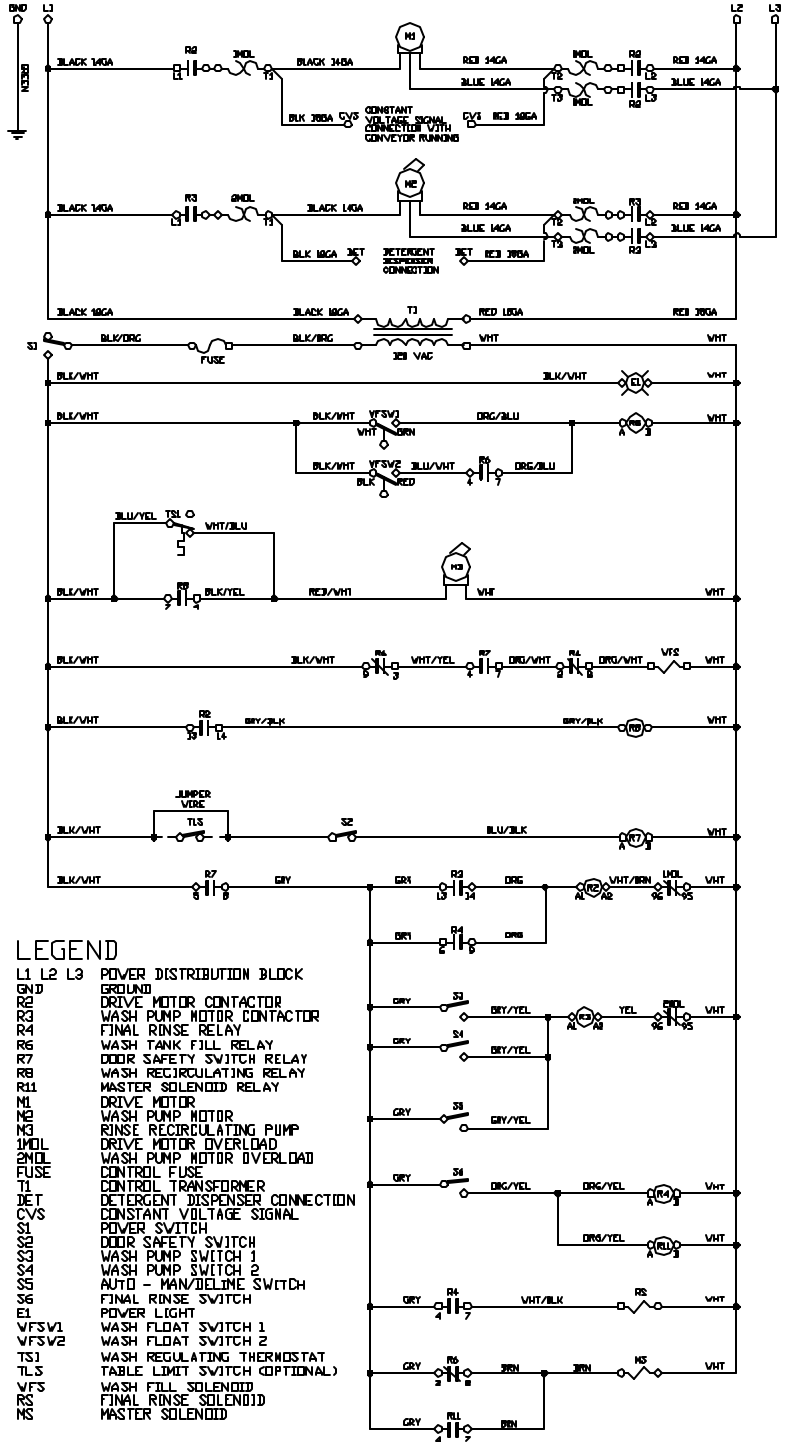
SECTION 7: ELECTRICAL SCHEMATICS

AJ-44TG (208-230 VOLT/60 HZ/3 PHASE)


LEGEND
L1 L2 L3 POWER DISTRIBUTION BLOCK
GND GROUND
R2 DRIVE MOTOR CONTACTOR
R3 WASH PUMP MOTOR CONTACTOR
R4 FINAL RINSE RELAY
R6 WASH TANK FILL RELAY
R7 DOOR SAFETY SWITCH RELAY
R8 WASH RECIRCULATING RELAY
R11 MASTER SOLENOID RELAY
M1 DRIVE MOTOR
M2 WASH PUMP MOTOR
M3 RINSE RECIRCULATING PUMP
1MOL DRIVE MOTOR OVERLOAD
2MOL WASH PUMP MOTOR OVERLOAD
CB CONTROL CIRCUIT BREAKER
T1 CONTROL TRANSFORMER
DET DETERGENT DISPENSER CONNECTION
CVS CONSTANT VOLTAGE SIGNAL
S1 POWER SWITCH
S2 DOOR SAFETY SWITCH
S3 WASH PUMP SWITCH 1
S4 WASH PUMP SWITCH 2
S5 AUTO - MAN/DELIME SWITCH
S6 FINAL RINSE SWITCH
E1 POWER LIGHT
WFSW1 WASH FLOAT SWITCH 1
WFSW2 WASH FLOAT SWITCH 2
TSL WASH REGULATING THERMOSTAT
TLS TABLE LIMIT SWITCH (OPTIONAL)
WFS WASH FILL SOLENOID
RS FINAL RINSE SOLENOID
MS MASTER SOLENOID
9905-002-33-11a.

SECTION 7: ELECTRICAL SCHEMATICS

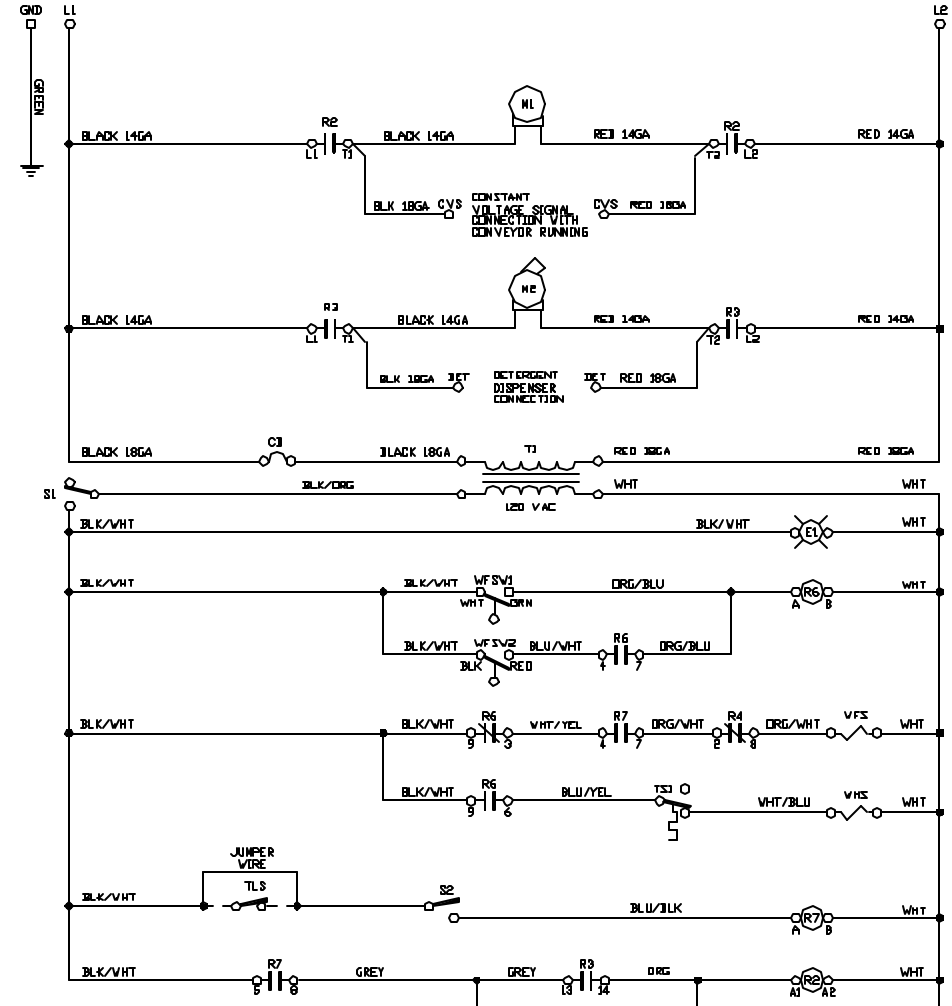
AJ-44TG (460 VOLT/60 HZ/3 PHASE)



9905-002-53-24

SECTION 7: ELECTRICAL SCHEMATICS

AJ-44TS (208-230 VOLT/60 HZ/1 PHASE)



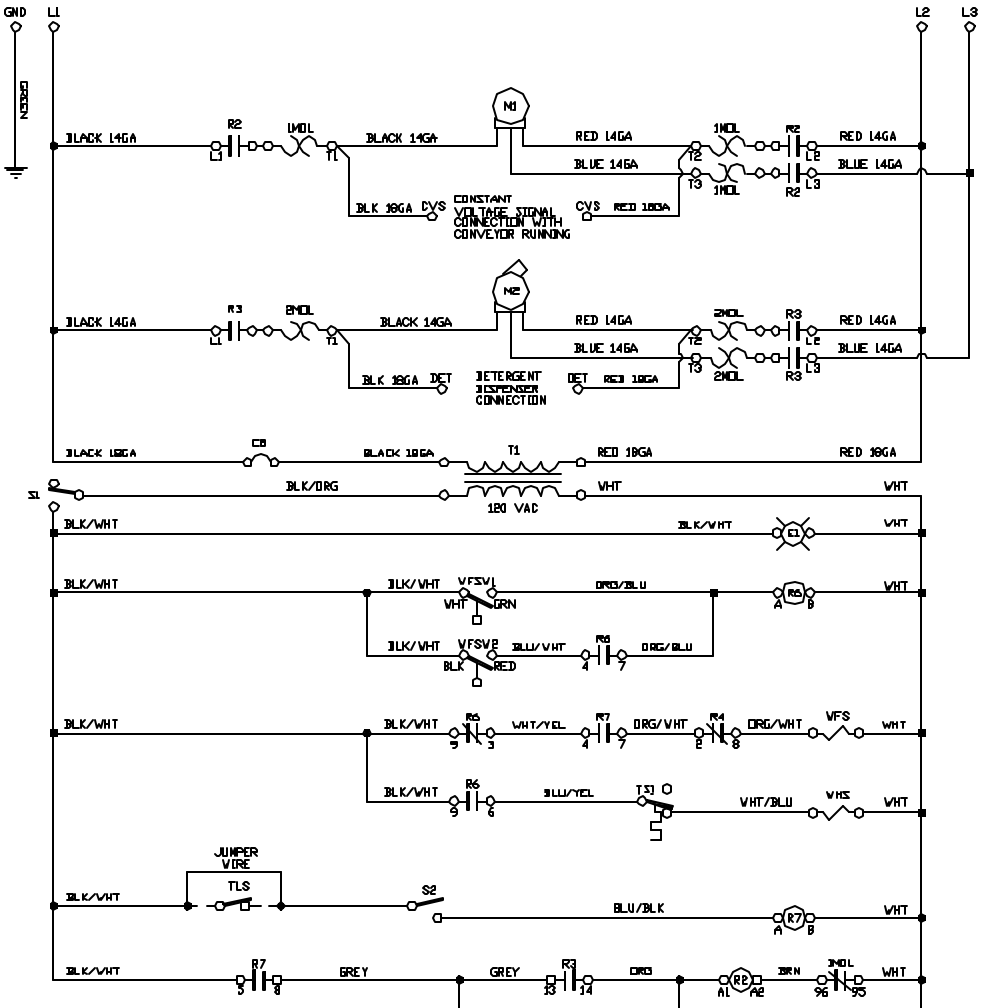
LEGEND

L1 L2 L3	POWER DISTRIBUTION BLOCK
GND	GROUND
R2	DRIVE MOTOR CONTACTOR
R3	WASH PUMP MOTOR CONTACTOR
R4	FINAL RINSE RELAY
R6	WASH TANK FILL RELAY
R7	DOOR SAFETY SWITCH RELAY
M1	DRIVE MOTOR
M2	WASH PUMP MOTOR
CB	CONTROL CIRCUIT BREAKER
T1	CONTROL TRANSFORMER
DET	DETERGENT DISPENSER CONNECTION
CVS	CONSTANT VOLTAGE SIGNAL
S1	POWER SWITCH
S2	DOOR SAFETY SWITCH
S3	WASH PUMP SWITCH 1
S4	WASH PUMP SWITCH 2
S5	AUTO - MAN/DELIME SWITCH
S6	FINAL RINSE SWITCH
E1	POWER LIGHT
WFSW1	WASH FLOAT SWITCH 1
WFSW2	WASH FLOAT SWITCH 2
TS1	WASH REGULATING THERMOSTAT
TLS	TABLE LIMIT SWITCH (OPTIONAL)
WFS	WASH FILL SOLENOID
WHS	WASH HEAT SOLENOID
RS	FINAL RINSE SOLENOID

9905-031-80-23a

SECTION 7: ELECTRICAL SCHEMATICS

AJ-44TS (208-230 VOLT/60 HZ/3 PHASE)



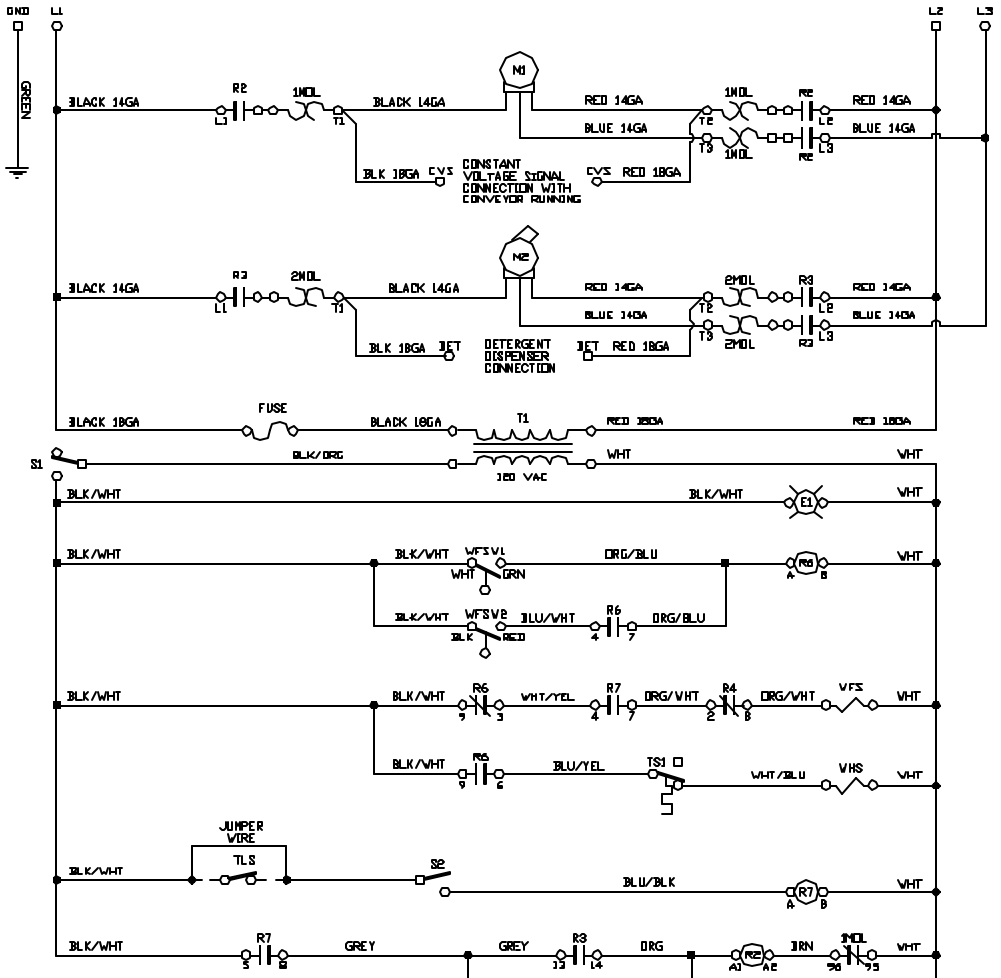
LEGEND

L1 L2 L3	POWER DISTRIBUTION BLOCK
GND	GROUND
R2	DRIVE MOTOR CONTACTOR
R3	WASH PUMP MOTOR CONTACTOR
R4	FINAL RINSE RELAY
R6	WASH TANK FILL RELAY
R7	DOOR SAFETY SWITCH RELAY
M1	DRIVE MOTOR
M2	WASH PUMP MOTOR
1MOL	DRIVE MOTOR OVERLOAD
2MOL	WASH PUMP MOTOR OVERLOAD
CB	CONTROL CIRCUIT BREAKER
T1	CONTROL TRANSFORMER
DET	DETERGENT DISPENSER CONNECTION
CVS	CONSTANT VOLTAGE SIGNAL
S1	POWER SWITCH
S2	DOOR SAFETY SWITCH
S3	WASH PUMP SWITCH 1
S4	WASH PUMP SWITCH 2
S5	AUTO - MAN/DELIME SWITCH
S6	FINAL RINSE SWITCH
E1	POWER LIGHT
WFSW1	WASH FLOAT SWITCH 1
WFSW2	WASH FLOAT SWITCH 2
TS1	WASH REGULATING THERMOSTAT
TLS	TABLE LIMIT SWITCH (OPTIONAL)
WFS	WASH FILL SOLENOID
WHS	WASH HEAT SOLENOID
RS	FINAL RINSE SOLENOID

9905-031-80-24

SECTION 7: ELECTRICAL SCHEMATICS

AJ-44TS (460 VOLT/60 HZ/3 PHASE)



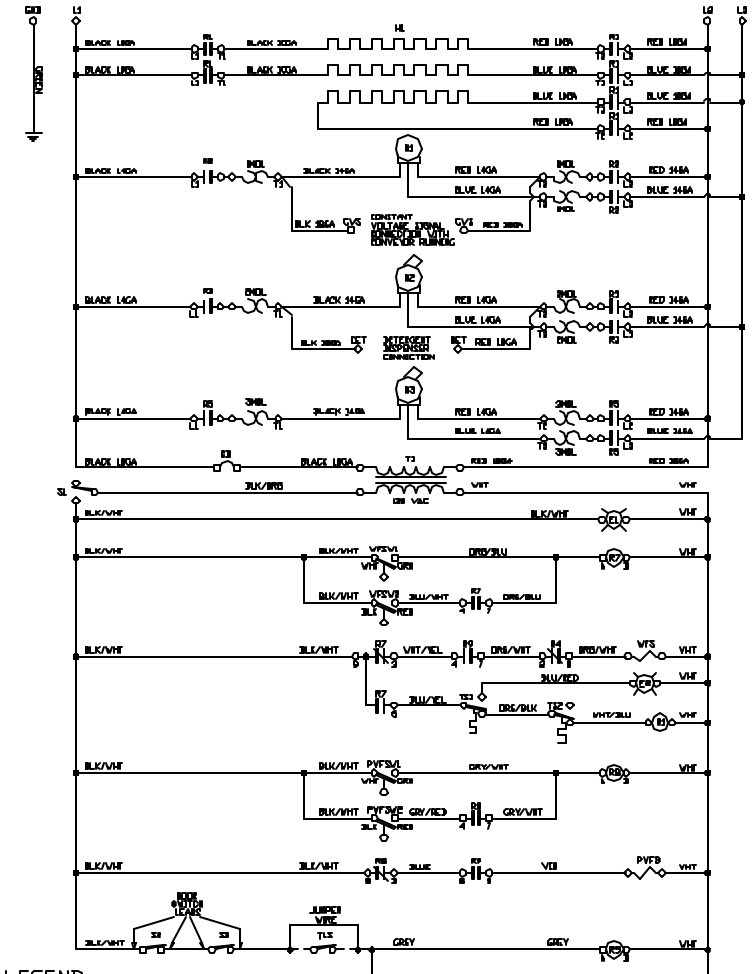
LEGEND

L1 L2 L3	POWER DISTRIBUTION BLOCK
GND	GROUND
R2	DRIVE MOTOR CONTACTOR
R3	WASH PUMP MOTOR CONTACTOR
R4	FINAL RINSE RELAY
R6	WASH TANK FILL RELAY
R7	DOOR SAFETY SWITCH RELAY
M1	DRIVE MOTOR
M2	WASH PUMP MOTOR
1MOL	DRIVE MOTOR OVERLOAD
2MOL	WASH PUMP MOTOR OVERLOAD
FUSE	CONTROL FUSE
T1	CONTROL TRANSFORMER
DET	DETERGENT DISPENSER CONNECTION
CVS	CONSTANT VOLTAGE SIGNAL
S1	POWER SWITCH
S2	DOOR SAFETY SWITCH
S3	WASH PUMP SWITCH 1
S4	WASH PUMP SWITCH 2
S5	AUTO - MAN/DELIME SWITCH
S6	FINAL RINSE SWITCH
E1	POWER LIGHT
WFSW1	WASH FLOAT SWITCH 1
WFSW2	WASH FLOAT SWITCH 2
TS1	WASH REGULATING THERMOSTAT
TLS	TABLE LIMIT SWITCH (OPTIONAL)
WFS	WASH FILL SOLENOID
WHS	WASH HEAT SOLENOID
RS	FINAL RINSE SOLENOID

9905-031-80-26

SECTION 7: ELECTRICAL SCHEMATICS

AJ-66TE & AJ-80TE (208-230 VOLT/60 HZ/1 PHASE)



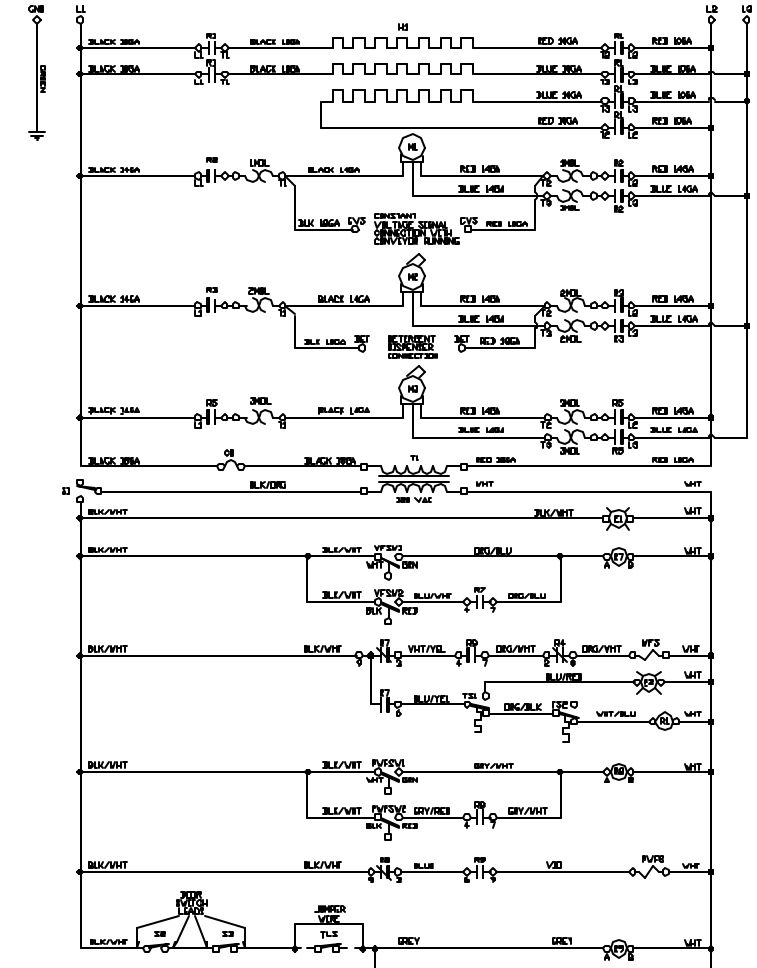
LEGEND

L1 L2 L3	POWER DISTRIBUTION BLOCK
GND	GROUND
R1	HEAT CONTACTOR
R2	DRIVE MOTOR CONTACTOR
R3	WASH PUMP MOTOR CONTACTOR
R4	FINAL RINSE RELAY
R5	PRE-WASH PUMP MOTOR CONTACTOR
R7	WASH TANK FILL RELAY
R8	PRE-WASH TANK FILL RELAY
R9	DOOR SAFETY SWITCH RELAY
H1	WASH HEATER
M1	DRIVE MOTOR
M2	WASH PUMP MOTOR
M3	PRE-WASH PUMP MOTOR
1MOL	DRIVE MOTOR OVERLOAD
2MOL	WASH PUMP MOTOR OVERLOAD
3MOL	PRE-WASH PUMP MOTOR OVERLOAD
CB	CONTROL CIRCUIT BREAKER
TL	CONTROL TRANSFORMER
DET	DETERGENT DISPENSER CONNECTION
CVS	CONSTANT VOLTAGE SIGNAL
S1	POWER SWITCH
S2	DOOR SAFETY SWITCH 1
S3	DOOR SAFETY SWITCH 2
S4	WASH PUMP SWITCH 1
S5	WASH PUMP SWITCH 2
S6	AUTO - MAN/DELIME SWITCH
S7	FINAL RINSE SWITCH
S8	PRE-WASH PUMP SWITCH
E1	POWER LIGHT
E2	HEATER HIGH LIMIT LIGHT
WFSW1	WASH FLOAT SWITCH 1
WFSW2	WASH FLOAT SWITCH 2
PWFSW1	PRE-WASH FLOAT SWITCH 1
PWFSW2	PRE-WASH FLOAT SWITCH 2
TSH	HEATER HIGH LIMIT THERMOSTAT
TSR	WASH REGULATING THERMOSTAT
CWTS	COLD WATER THERMOSTAT (OPTIONAL)
CWV	COLD WATER VALVE (OPTIONAL)
TLS	TABLE LIMIT SWITCH (OPTIONAL)
WFS	WASH FILL SOLENOID
PWFS	PRE-WASH FILL SOLENOID
RS	FINAL RINSE SOLENOID

9905-03L-7D-76d

SECTION 7: ELECTRICAL SCHEMATICS

AJ-66TE & AJ-80TE (208-230 VOLT/60 HZ/3 PHASE)



LEGEND

L1 L2 L3	POWER DISTRIBUTION BLOCK
GND	GROUND
R1	HEAT CONTACTOR
R2	DRIVE MOTOR CONTACTOR
R3	WASH PUMP MOTOR CONTACTOR
R4	FINAL RINSE RELAY
R5	PRE-WASH PUMP MOTOR CONTACTOR
R7	WASH TANK FILL RELAY
R8	PRE-WASH TANK FILL RELAY
R9	DOOR SAFETY SWITCH RELAY
H1	WASH HEATER
M1	DRIVE MOTOR
M2	WASH PUMP MOTOR
M3	PRE-WASH PUMP MOTOR
1MOL	DRIVE MOTOR OVERLOAD
2MOL	WASH PUMP MOTOR OVERLOAD
3MOL	PRE-WASH PUMP MOTOR OVERLOAD
CB	CONTROL CIRCUIT BREAKER
TJ	CONTROL TRANSFORMER
DET	DETERGENT DISPENSER CONNECTION
CVS	CONSTANT VOLTAGE SIGNAL
S1	POWER SWITCH
S2	DOOR SAFETY SWITCH 1
S3	DOOR SAFETY SWITCH 2
S4	WASH PUMP SWITCH 1
S5	WASH PUMP SWITCH 2
S6	AUTO - MAN/DELIME SWITCH
S7	FINAL RINSE SWITCH
S8	PRE-WASH PUMP SWITCH
E1	POWER LIGHT
E2	HEATER HIGH LIMIT LIGHT
WFSV1	WASH FLOAT SWITCH 1
WFSV2	WASH FLOAT SWITCH 2
PWFSV1	PRE-WASH FLOAT SWITCH 1
PWFSV2	PRE-WASH FLOAT SWITCH 2
TSL	HEATER HIGH LIMIT THERMOSTAT
TS2	WASH REGULATING THERMOSTAT
CWTS	COLD WATER THERMOSTAT (OPTIONAL)
CWV	COLD WATER VALVE (OPTIONAL)
TLS	TABLE LIMIT SWITCH (OPTIONAL)
WFS	WASH FILL SOLENOID
PWFS	PRE-WASH FILL SOLENOID
RS	FINAL RINSE SOLENOID

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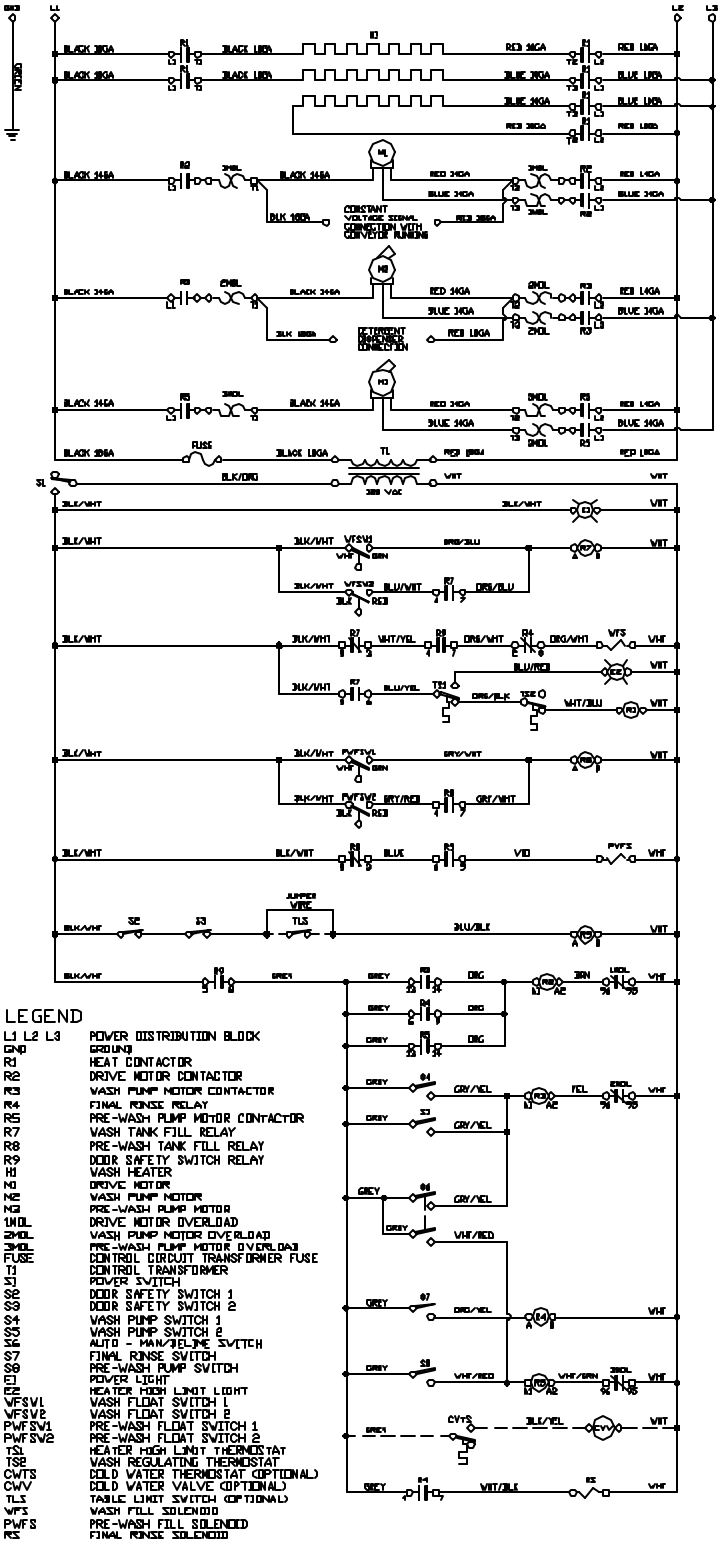
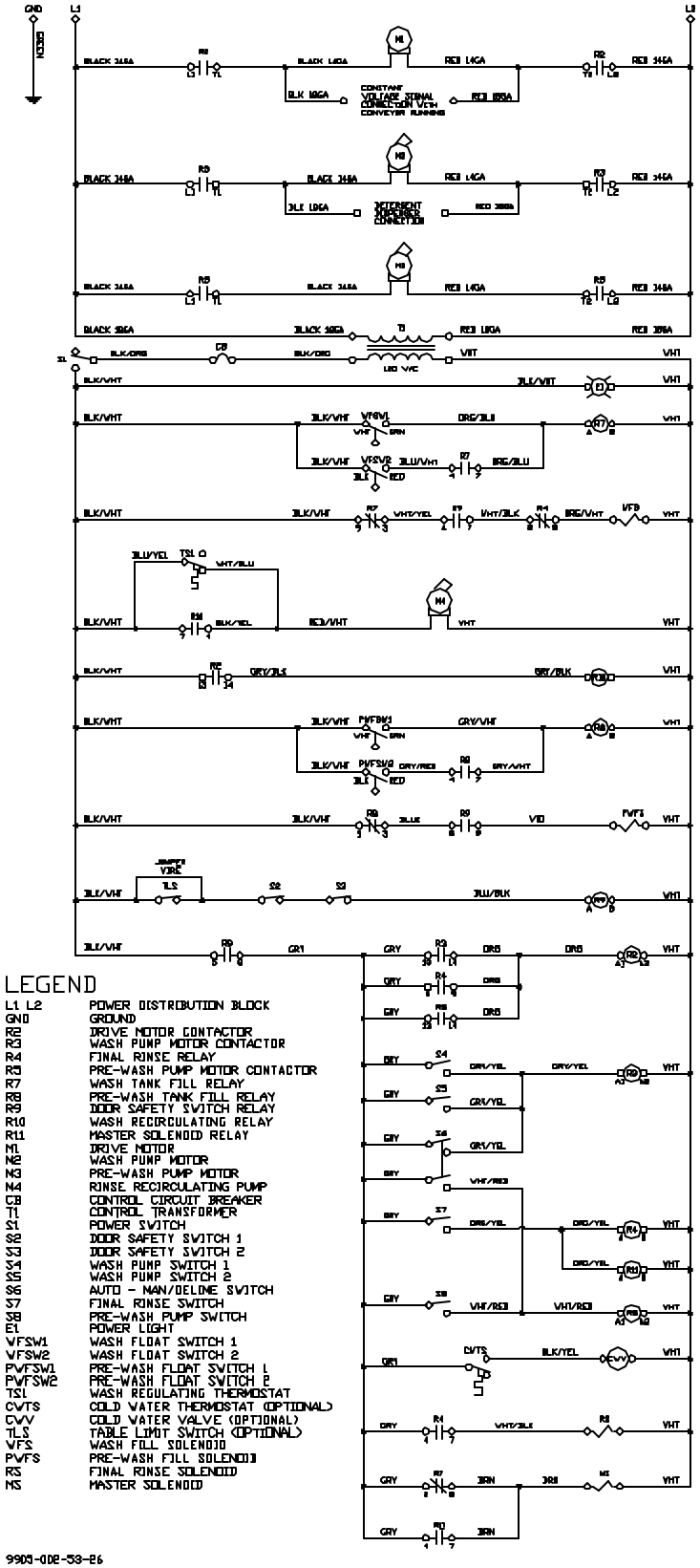
SECTION 7: ELECTRICAL SCHEMATICS

AJ-66TE & AJ-80TE (460 VOLT/60 HZ/3 PHASE)


LEGEND
L1 L2 L3 POWER DISTRIBUTION BLOCK
GND GROUND
R1 HEAT CONTACTOR
R2 DRIVE MOTOR CONTACTOR
R3 WASH PUMP MOTOR CONTACTOR
R4 FINAL RINSE RELAY
R5 PRE-WASH PUMP MOTOR CONTACTOR
R7 WASH TANK FILL RELAY
R8 PRE-WASH TANK FILL RELAY
R9 DOOR SAFETY SWITCH RELAY
H1 WASH HEATER
M1 DRIVE MOTOR
M2 WASH PUMP MOTOR
M3 PRE-WASH PUMP MOTOR
1MOL DRIVE MOTOR OVERLOAD
2MOL WASH PUMP MOTOR OVERLOAD
3MOL PRE-WASH PUMP MOTOR OVERLOAD
FUSE CONTROL CIRCUIT TRANSFORMER FUSE
T1 CONTROL TRANSFORMER
S1 POWER SWITCH
S2 DOOR SAFETY SWITCH 1
S3 DOOR SAFETY SWITCH 2
S4 WASH PUMP SWITCH 1
S5 WASH PUMP SWITCH 2
S6 AUTO - MAN/TIME SWITCH
S7 FINAL RINSE SWITCH
S8 PRE-WASH PUMP SWITCH
E1 POWER LIGHT
E2 HEATER HIGH LIMIT LIGHT
WFSV1 WASH FLOAT SWITCH 1
WFSV2 WASH FLOAT SWITCH 2
PWFSV1 PRE-WASH FLOAT SWITCH 1
PWFSV2 PRE-WASH FLOAT SWITCH 2
TSL HEATER HIGH LIMIT THERMOSTAT
TSR WASH REGULATING THERMOSTAT
CWTS COLD WATER THERMOSTAT (OPTIONAL)
CWV COLD WATER VALVE (OPTIONAL)
TLS TABLE LIMIT SWITCH (OPTIONAL)
WFS WASH FILL SOLENOID
PWFS PRE-WASH FILL SOLENOID
RS FINAL RINSE SOLENOID
9905-031-72-98c

SECTION 7: ELECTRICAL SCHEMATICS

AJ-66TG & AJ-80TG (208-230 VOLTS/60 HZ/1 PHASE)



LEGEND

L1 L2	POWER DISTRIBUTION BLOCK
GND	GROUND
R2	DRIVE MOTOR CONTACTOR
R3	WASH PUMP MOTOR CONTACTOR
R4	FINAL RINSE RELAY
R5	PRE-WASH PUMP MOTOR CONTACTOR
R7	WASH TANK FILL RELAY
R8	PRE-WASH TANK FILL RELAY
R9	DOOR SAFETY SWITCH RELAY
R10	WASH RECIRCULATING RELAY
R11	MASTER SOLENOID RELAY
M1	DRIVE MOTOR
M2	WASH PUMP MOTOR
M3	PRE-WASH PUMP MOTOR
M4	RINSE RECIRCULATING PUMP
CB	CONTROL CIRCUIT BREAKER
T1	CONTROL TRANSFORMER
S1	POWER SWITCH
S2	DOOR SAFETY SWITCH 1
S3	DOOR SAFETY SWITCH 2
S4	WASH PUMP SWITCH 1
S5	WASH PUMP SWITCH 2
S6	AUTO - MAN/DELIME SWITCH
S7	FINAL RINSE SWITCH
S8	PRE-WASH PUMP SWITCH
E1	POWER LIGHT
WFSW1	WASH FLOAT SWITCH 1
WFSW2	WASH FLOAT SWITCH 2
PWFSW1	PRE-WASH FLOAT SWITCH 1
PWFSW2	PRE-WASH FLOAT SWITCH 2
TSL	WASH REGULATING THERMOSTAT
CWTS	COLD WATER THERMOSTAT (OPTIONAL)
CWV	COLD WATER VALVE (OPTIONAL)
TLS	TABLE LIMIT SWITCH (OPTIONAL)
WFS	WASH FILL SOLENOID
PWFS	PRE-WASH FILL SOLENOID
RS	FINAL RINSE SOLENOID
MS	MASTER SOLENOID

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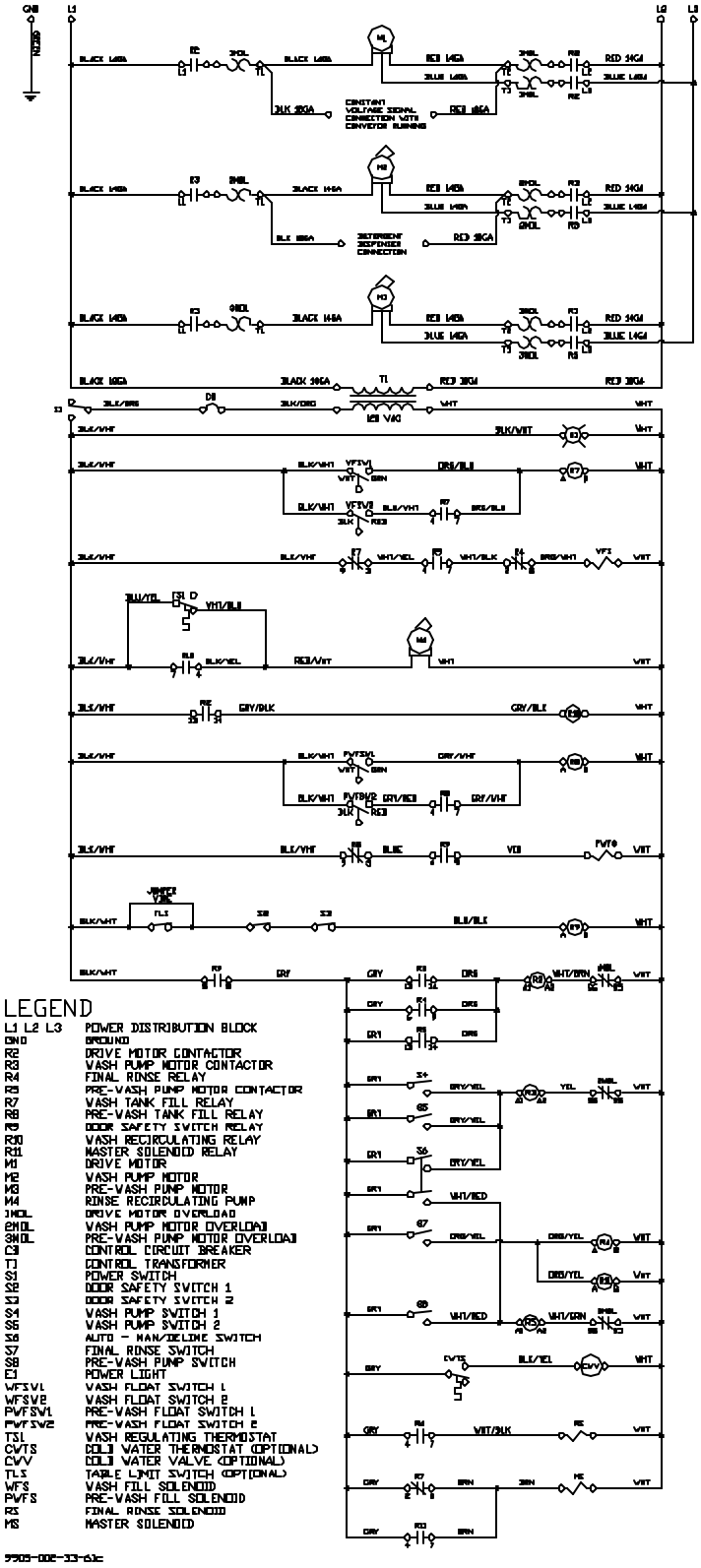
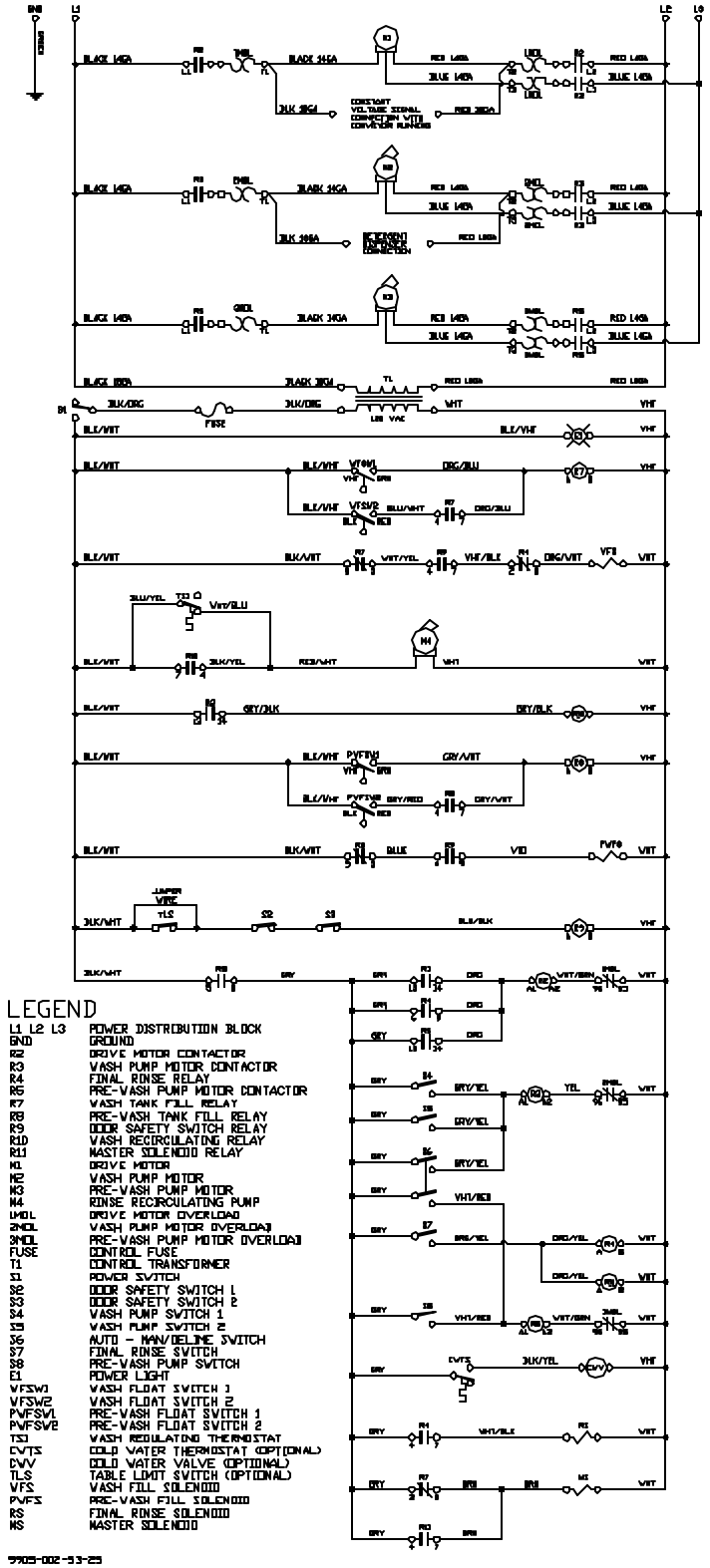
SECTION 7: ELECTRICAL SCHEMATICS

AJ-66TG & AJ-80TG (208-230 VOLTS/60 HZ/3 PHASE)


LEGEND
L1 L2 L3 POWER DISTRIBUTION BLOCK
GND GROUND
R2 DRIVE MOTOR CONTACTOR
R3 WASH PUMP MOTOR CONTACTOR
R4 FINAL RINSE RELAY
R5 PRE-WASH PUMP MOTOR CONTACTOR
R7 WASH TANK FILL RELAY
R8 PRE-WASH TANK FILL RELAY
R9 DOOR SAFETY SWITCH RELAY
R10 WASH RECIRCULATING RELAY
R11 MASTER SOLENOID RELAY
M1 DRIVE MOTOR
M2 WASH PUMP MOTOR
M3 PRE-WASH PUMP MOTOR
M4 RINSE RECIRCULATING PUMP
1HOL DRIVE MOTOR OVERLOAD
2HOL WASH PUMP MOTOR OVERLOAD
3HOL PRE-WASH PUMP MOTOR OVERLOAD
CB CONTROL CIRCUIT BREAKER
T1 CONTROL TRANSFORMER
S1 POWER SWITCH
S2 DOOR SAFETY SWITCH 1
S3 DOOR SAFETY SWITCH 2
S4 WASH PUMP SWITCH 1
S5 WASH PUMP SWITCH 2
S6 AUTO - MAN/DELIME SWITCH
S7 FINAL RINSE SWITCH
S8 PRE-WASH PUMP SWITCH
E1 POWER LIGHT
WFSV1 WASH FLOAT SWITCH 1
WFSV2 WASH FLOAT SWITCH 2
PWFSW1 PRE-WASH FLOAT SWITCH 1
PWFSW2 PRE-WASH FLOAT SWITCH 2
TSL WASH REGULATING THERMOSTAT
CWTS COIL WATER THERMOSTAT (OPTIONAL)
CWV COIL WATER VALVE (OPTIONAL)
TLS TABLE LIMIT SWITCH (OPTIONAL)
WFS WASH FILL SOLENOID
PWFS PRE-WASH FILL SOLENOID
RS FINAL RINSE SOLENOID
MS MASTER SOLENOID

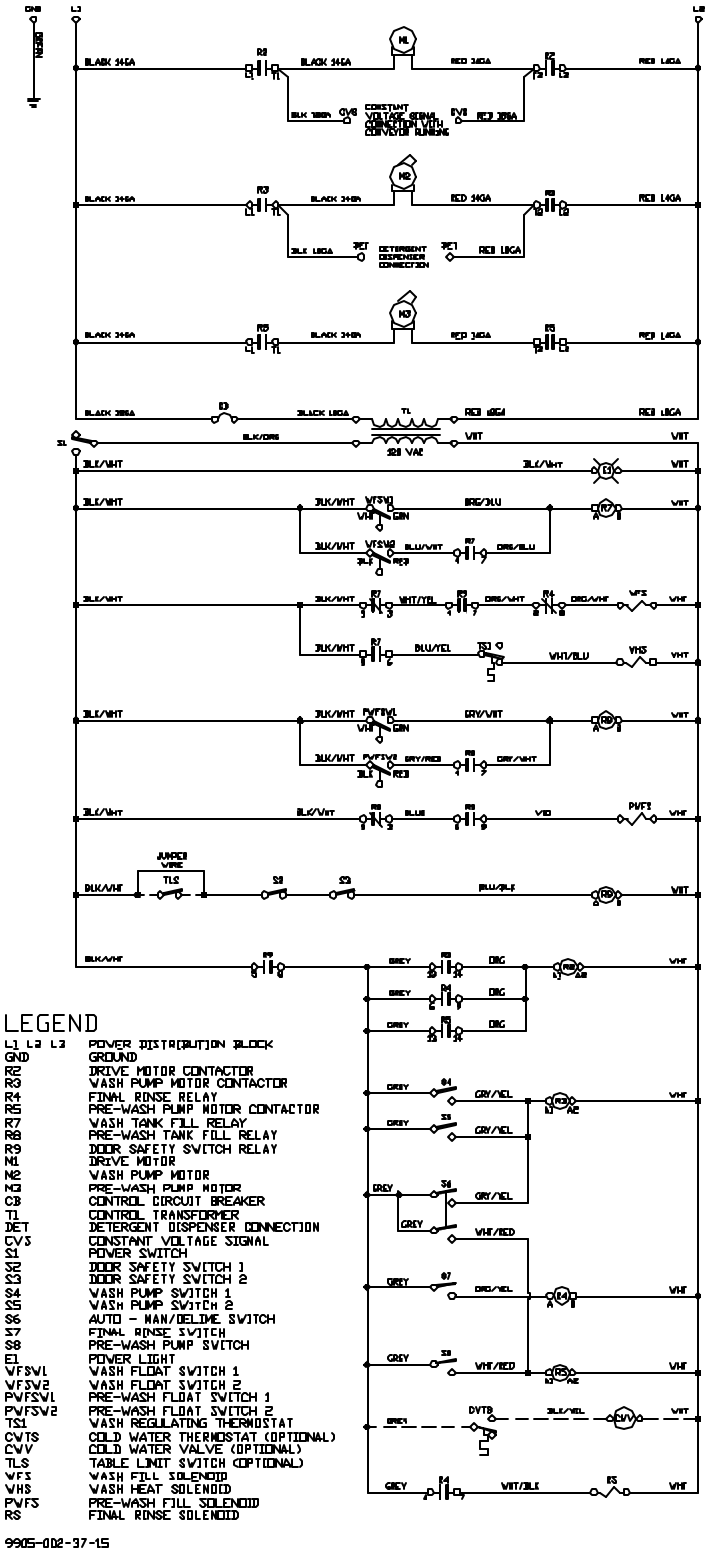
SECTION 7: ELECTRICAL SCHEMATICS

AJ-66T & AJ-80TG (460 VOLTS/60 HZ/3 PHASE)


LEGEND
L1 L2 L3 POWER DISTRIBUTION BLOCK
GND GROUND
R2 DRIVE MOTOR CONTACTOR
R3 WASH PUMP MOTOR CONTACTOR
R4 FINAL RINSE RELAY
R5 PRE-WASH PUMP MOTOR CONTACTOR
R7 WASH TANK FILL RELAY
R8 PRE-WASH TANK FILL RELAY
R9 DOOR SAFETY SWITCH RELAY
R10 WASH RECIRCULATING RELAY
R11 MASTER SOLENOID RELAY
M1 DRIVE MOTOR
M2 WASH PUMP MOTOR
M3 PRE-WASH PUMP MOTOR
M4 RINSE RECIRCULATING PUMP
1MOL DRIVE MOTOR OVERLOAD
2MOL WASH PUMP MOTOR OVERLOAD
3MOL PRE-WASH PUMP MOTOR OVERLOAD
FUSE CONTROL FUSE
T1 CONTROL TRANSFORMER
S1 POWER SWITCH
S2 DOOR SAFETY SWITCH 1
S3 DOOR SAFETY SWITCH 2
S4 WASH PUMP SWITCH 1
S5 WASH PUMP SWITCH 2
S6 AUTO - MAN/DELIME SWITCH
S7 FINAL RINSE SWITCH
S8 PRE-WASH PUMP SWITCH
E1 POWER LIGHT
WFSW1 WASH FLOAT SWITCH 1
WFSW2 WASH FLOAT SWITCH 2
PWFSW1 PRE-WASH FLOAT SWITCH 1
PWFSW2 PRE-WASH FLOAT SWITCH 2
TS1 WASH REGULATING THERMOSTAT
CVTS COLD WATER THERMOSTAT (OPTIONAL)
CVV COLD WATER VALVE (OPTIONAL)
TLS TABLE LIMIT SWITCH (OPTIONAL)
WFS WASH FILL SOLENOID
PWFS PRE-WASH FILL SOLENOID
RS FINAL RINSE SOLENOID
MS MASTER SOLENOID
5705-002-53-25

SECTION 7: ELECTRICAL SCHEMATICS

AJ-66TS & AJ-80TS (208-230 VOLT/60 HZ/1 PHASE)



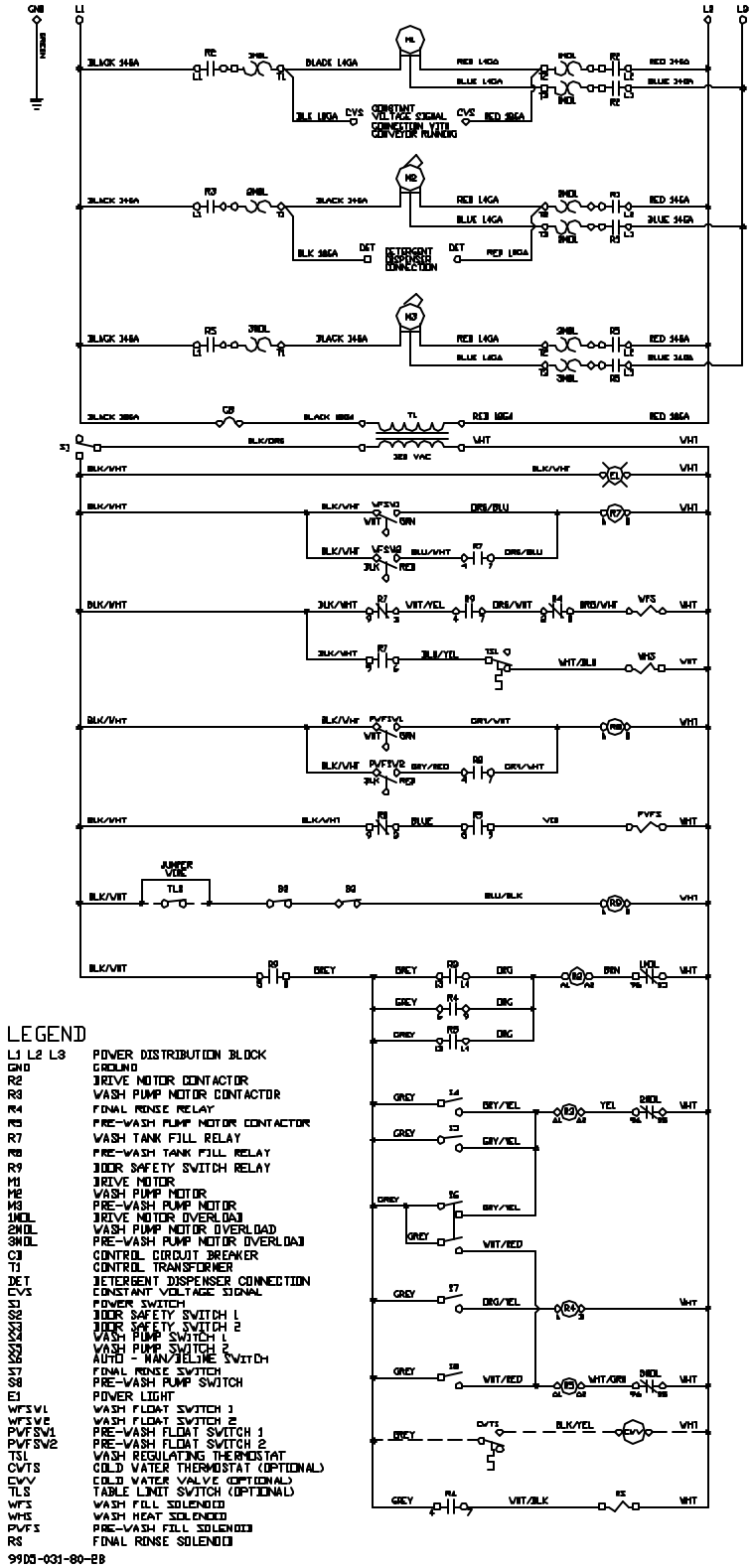
LEGEND

L1 L2 L3	POWER DISTRIBUTION BLOCK
GND	GROUND
R2	DRIVE MOTOR CONTACTOR
R3	WASH PUMP MOTOR CONTACTOR
R4	FINAL RINSE RELAY
R5	PRE-WASH PUMP MOTOR CONTACTOR
R7	WASH TANK FILL RELAY
R8	PRE-WASH TANK FILL RELAY
R9	DOOR SAFETY SWITCH RELAY
M1	DRIVE MOTOR
M2	WASH PUMP MOTOR
M3	PRE-WASH PUMP MOTOR
CB	CONTROL CIRCUIT BREAKER
T1	CONTROL TRANSFORMER
DET	DETERGENT DISPENSER CONNECTION
CVS	CONSTANT VOLTAGE SIGNAL
S1	POWER SWITCH
S2	DOOR SAFETY SWITCH 1
S3	DOOR SAFETY SWITCH 2
S4	WASH PUMP SWITCH 1
S5	WASH PUMP SWITCH 2
S6	AUTO - MAN/DELIME SWITCH
S7	FINAL RINSE SWITCH
S8	PRE-WASH PUMP SWITCH
E1	POWER LIGHT
WFSW1	WASH FLOAT SWITCH 1
WFSW2	WASH FLOAT SWITCH 2
PWFSW1	PRE-WASH FLOAT SWITCH 1
PWFSW2	PRE-WASH FLOAT SWITCH 2
TS1	WASH REGULATING THERMOSTAT
CWTS	COLD WATER THERMOSTAT (OPTIONAL)
CWV	COLD WATER VALVE (OPTIONAL)
TLS	TABLE LIMIT SWITCH (OPTIONAL)
WFS	WASH FILL SOLENOID
WHS	WASH HEAT SOLENOID
PWFS	PRE-WASH FILL SOLENOID
RS	FINAL RINSE SOLENOID

9905-002-37-15

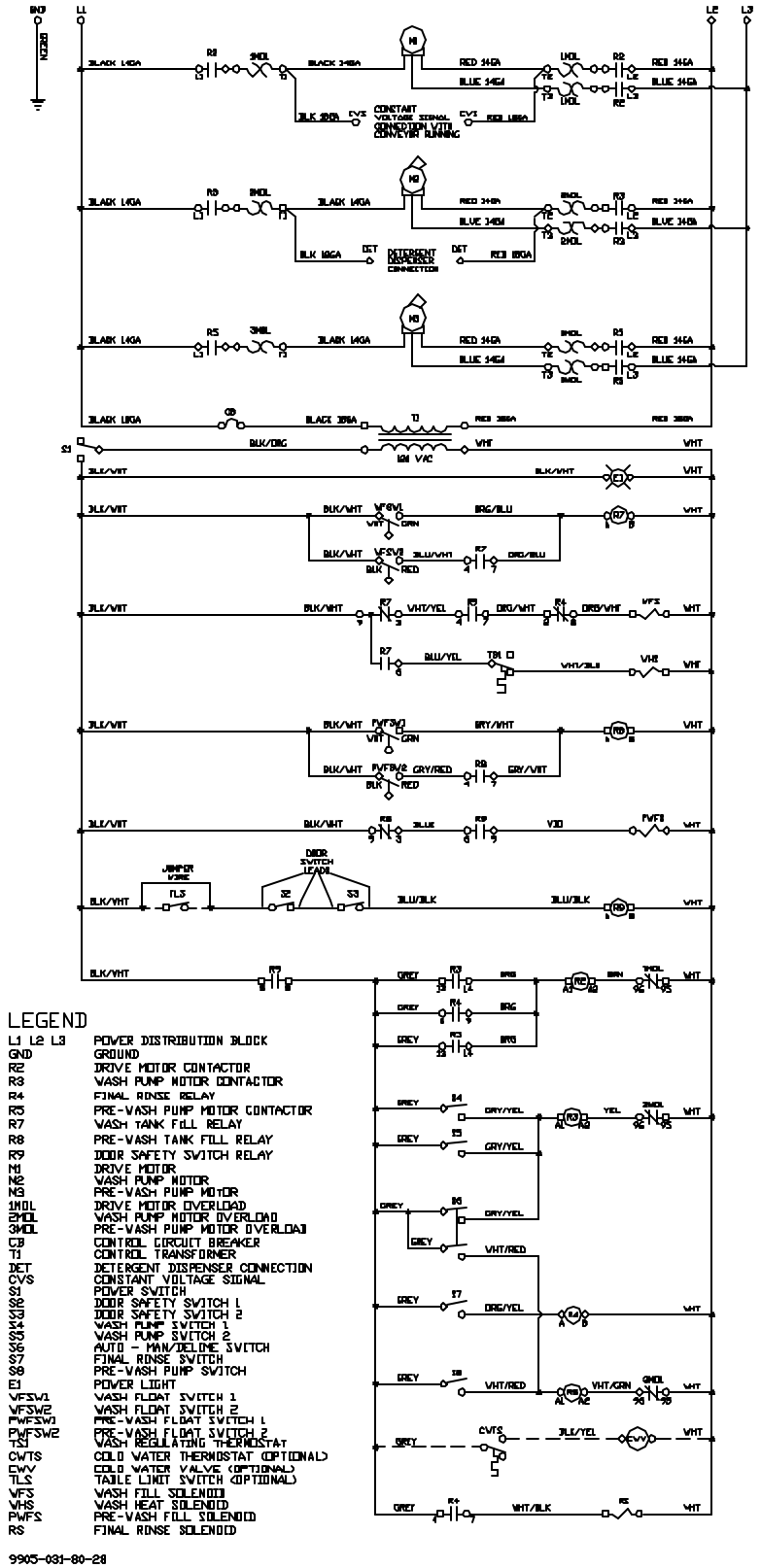
SECTION 7: ELECTRICAL SCHEMATICS

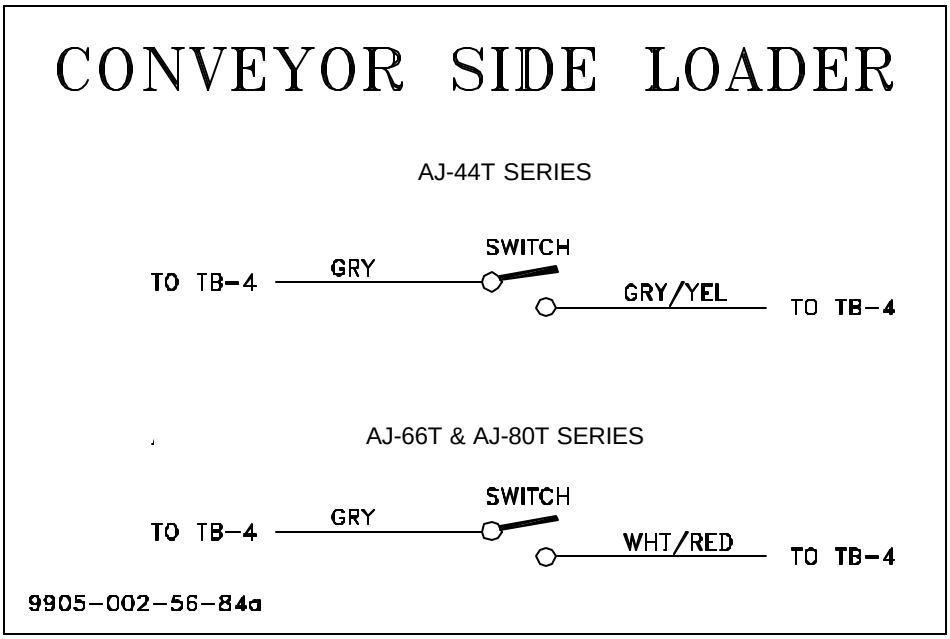
AJ-66TS & AJ-80TS (208-230 VOLT/60 HZ/3 PHASE)


LEGEND
L1 L2 L3 POWER DISTRIBUTION BLOCK
GND GROUND
R2 DRIVE MOTOR CONTACTOR
R3 WASH PUMP MOTOR CONTACTOR
R4 FINAL RINSE RELAY
R5 PRE-WASH PUMP MOTOR CONTACTOR
R7 WASH TANK FILL RELAY
R8 PRE-WASH TANK FILL RELAY
R9 DOOR SAFETY SWITCH RELAY
M1 DRIVE MOTOR
M2 WASH PUMP MOTOR
M3 PRE-WASH PUMP MOTOR
1MOL DRIVE MOTOR OVERLOAD
2MOL WASH PUMP MOTOR OVERLOAD
3MOL PRE-WASH PUMP MOTOR OVERLOAD
CB CONTROL CIRCUIT BREAKER
T1 CONTROL TRANSFORMER
DET DETERGENT DISPENSER CONNECTION
CVS CONSTANT VOLTAGE SIGNAL
S1 POWER SWITCH
S82 DOOR SAFETY SWITCH 1
S83 DOOR SAFETY SWITCH 2
S21 WASH PUMP SWITCH 1
S22 WASH PUMP SWITCH 2
S6 AUTO - MAN/JETLINE SWITCH
S27 FINAL RINSE SWITCH
S8 PRE-WASH PUMP SWITCH
E1 POWER LIGHT
WFSW1 WASH FLOAT SWITCH 1
WFSW2 WASH FLOAT SWITCH 2
PWFSW1 PRE-WASH FLOAT SWITCH 1
PWFSW2 PRE-WASH FLOAT SWITCH 2
TSL WASH REGULATING THERMOSTAT
CWTS COLD WATER THERMOSTAT (OPTIONAL)
CWV COLD WATER VALVE (OPTIONAL)
TLS TABLE LIMIT SWITCH (OPTIONAL)
WFS WASH FILL SOLENOID
WHS WASH HEAT SOLENOID
PWFS PRE-WASH FILL SOLENOID
RS FINAL RINSE SOLENOID
9905-031-80-EB

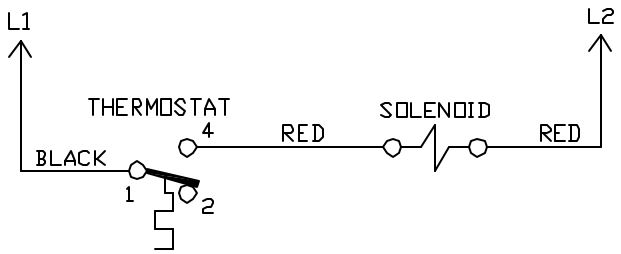
SECTION 7: ELECTRICAL SCHEMATICS

AJ-66TS & AJ-80TS (460 VOLT/60 HZ/3 PHASE)


LEGEND
L1 L2 L3 POWER DISTRIBUTION BLOCK
GND GROUND
R2 DRIVE MOTOR CONTACTOR
R3 WASH PUMP MOTOR CONTACTOR
R4 FINAL RINSE RELAY
R5 PRE-WASH PUMP MOTOR CONTACTOR
R7 WASH TANK FILL RELAY
R8 PRE-WASH TANK FILL RELAY
R9 DOOR SAFETY SWITCH RELAY
M1 DRIVE MOTOR
M2 WASH PUMP MOTOR
M3 PRE-WASH PUMP MOTOR
1MOL DRIVE MOTOR OVERLOAD
2MOL WASH PUMP MOTOR OVERLOAD
3MOL PRE-WASH PUMP MOTOR OVERLOAD
CB CONTROL CIRCUIT BREAKER
T1 CONTROL TRANSFORMER
DET DETERGENT DISPENSER CONNECTION
CVS CONSTANT VOLTAGE SIGNAL
S1 POWER SWITCH
S2 DOOR SAFETY SWITCH 1
S3 DOOR SAFETY SWITCH 2
S4 WASH PUMP SWITCH 1
S5 WASH PUMP SWITCH 2
S6 AUTO - MAN/DECLINE SWITCH
S7 FINAL RINSE SWITCH
S8 PRE-WASH PUMP SWITCH
E1 POWER LIGHT
WFSW1 WASH FLOAT SWITCH 1
WFSW2 WASH FLOAT SWITCH 2
PWFSW1 PRE-WASH FLOAT SWITCH 1
PWFSW2 PRE-WASH FLOAT SWITCH 2
TS1 WASH REGULATING THERMOSTAT
CWTS COLD WATER THERMOSTAT (OPTIONAL)
CWV COLD WATER VALVE (OPTIONAL)
TLS TABLE LIMIT SWITCH (OPTIONAL)
WFS WASH FILL SOLENOID
WHS WASH HEAT SOLENOID
PWFS PRE-WASH FILL SOLENOID
RS FINAL RINSE SOLENOID
9905-031-80-28



DRAIN QUENCH SCHEMATIC



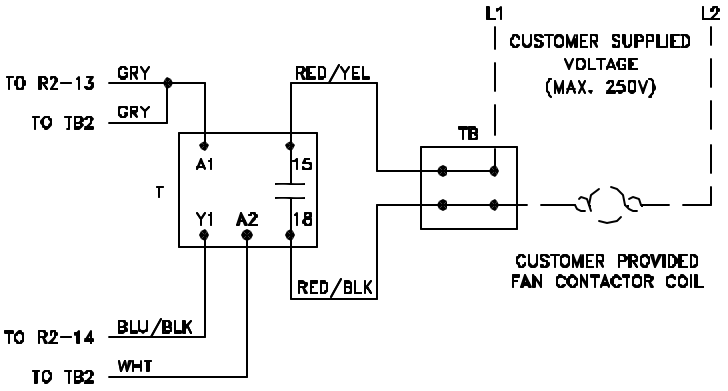
CONNECT BLACK WIRE TO MOTOR CONTACTOR - L1 WITH PIGGYBACK TERMINAL PROVIDED

CONNECT WHITE WIRE TO MOTOR CONTACTOR - L2 WITH PIGGYBACK TERMINAL PROVIDED

CONVEYOR EXHAUST FAN HOOKUP

LEGEND

T TIMER
TB TERMINAL BOARD



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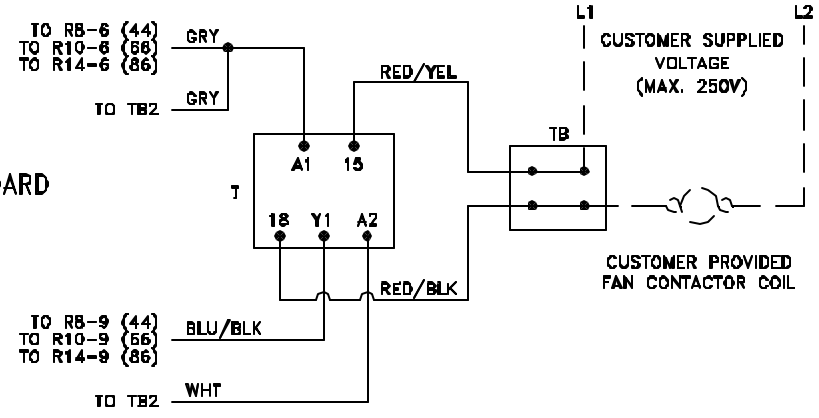
GAS CONVEYOR EXHAUST FAN HOOKUP

LEGEND

T TIMER
TB TERMINAL BOARD



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